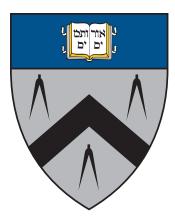
# School of Architecture 2019–2020



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The closing date for material in this bulletin was July 20, 2019. The University reserves the right to withdraw or modify the courses of instruction or to change the instructors at any time.

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# School of Architecture 2019–2020

BULLETIN OF YALE UNIVERSITY Series 115 Number 10 August 5, 2019

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# Calendar

# FALL 2019

July 15	М	Incoming First-Year M.Arch. I 1000c classes begin, 9 a.m.
July 22	М	Incoming First-Year M.Arch. II 1062c classes begin, 9 a.m.
Aug. 16	F	1000c and 1062c classes end, 5:20 p.m.
Aug. 19	М	Shop Orientation for incoming students begins, 9 a.m.
Aug. 23	F	Shop Orientation ends, 5 p.m.
Aug. 28	W	University Orientation for incoming students,
		10:30 a.m.–12 p.m.
Aug. 29	TH	Registration for all students, 9 a.m5 p.m.
		School Orientation for incoming students, 9–11 a.m.
		Advanced Studio Lottery, 11 a.m.
		Fall-term studio classes begin, 2 p.m.
Aug. 30	F	Fall-term non-studio classes begin, 8:30 a.m.
		Friday classes do not meet; Monday classes meet instead
Sept. 2	М	No classes. Labor Day
Oct. 21–25	M-F	Midterm week
Nov. 22	F	Fall recess begins, 5:20 p.m.
Dec. 2	М	Classes resume, 8:30 a.m.
Dec. 6	F	Fall-term classes end, 5:20 p.m.
Dec. 9–13	M-F	Design jury week
Dec. 16–18	M-W	Course examination period
Dec. 18	W	Winter recess begins, 5:20 p.m.
SPRING 20	20	
Jan. 2	тн	Closing date for applications for admission in 2020
Jan. 9	TH	Registration for all students, 9 a.m.–5 p.m.
		Advanced Studio Lottery, 11 a.m.
		Spring-term studio classes begin, 2 p.m.
Jan. 10	F	Spring-term non-studio classes begin, 8:30 a.m.
		Friday classes do not meet; Monday classes meet instead
Jan. 20	М	No classes. Martin Luther King, Jr. Day
Mar. 2–6	M-F	Midterm week
Mar. 6	F	Spring recess begins, 5:20 p.m.
Mar. 23	М	Classes resume, 8:30 a.m.
Apr. 24	F	Spring-term classes end, 5:20 p.m.
Apr. 27–May 1	M-F	Design jury week
Apr. 27–June 26	M-F	Fieldwork, 2017c, Building Project II
May 4–6	M-W	Course examination period, except for 2022b
May 8	F	Course examination period for 2022b
May 11	М	1019c classes begin, 9:30 a.m.
May 18	М	University Commencement
June 26	F	M.Arch. I first-year 1019c and 2017c classes end, 5:20 p.m.

# The President and Fellows of Yale University

## President

Peter Salovey, A.B., A.M., Ph.D.

### Fellows

His Excellency the Governor of Connecticut, ex officio Her Honor the Lieutenant Governor of Connecticut, ex officio Joshua Bekenstein, B.A., M.B.A., Wayland, Massachusetts Charles Waterhouse Goodyear IV, B.S., M.B.A., New Orleans, Louisiana Catharine Bond Hill, B.A., B.A., M.A., Ph.D., New York, New York Paul Lewis Joskow, B.A., Ph.D., Brookline, Massachusetts William Earl Kennard, B.A., J.D., Charleston, South Carolina Reiko Ann Miura-Ko, B.S., Ph.D., Menlo Park, California (June 2025) Gina Marie Raimondo, A.B., D.Phil., J.D., Providence, Rhode Island (June 2020) Emmett John Rice, Jr., B.A., M.B.A., Bethesda, Maryland Eve Hart Rice, B.A., M.D., Bedford, New York (June 2021) Joshua Linder Steiner, B.A., M.St., New York, New York David Li Ming Sze, B.A., M.B.A., Hillsborough, California Annette Thomas, S.B., Ph.D., Cambridge, England (June 2022) Kathleen Elizabeth Walsh, B.A., M.P.H., Wellesley, Massachusetts (June 2023) Douglas Alexander Warner III, B.A., Hobe Sound, Florida Michael James Warren, B.A., P.P.E., Washington, D.C. (June 2024) Lei Zhang, B.A., M.A., M.B.A., Hong Kong, China

# The Officers of Yale University

**President** Peter Salovey, A.B., A.M., Ph.D.

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Senior Vice President for Institutional Affairs and General Counsel Alexander Edward Dreier, A.B., M.A., J.D.

Vice President for Finance and Chief Financial Officer Stephen Charles Murphy, B.A.

Vice President for Alumni Affairs and Development Joan Elizabeth O'Neill, B.A.

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Vice President for Facilities and Campus Development John Harold Bollier, B.S., M.B.A.

**Vice President for Communications** Nathaniel Westgate Nickerson, B.A.

# School of Architecture Faculty and Administration, 2019–2020

## **Executive Officers**

Peter Salovey, A.B., A.M., Ph.D., President of the University Benjamin Polak, B.A., M.A., Ph.D., Provost of the University Deborah Berke, B.Arch., M.Arch., M.U.P., Dean Sunil Bald, B.A., M.Arch., Associate Dean Phillip G. Bernstein, B.A., M.Arch., Associate Dean Bimal Mendis, B.A., M.Arch., Assistant Dean Eeva-Liisa Pelkonen, M.Arch., M.E.D., Ph.D., Assistant Dean

## **Faculty Emeriti**

Kent C. Bloomer, B.F.A., M.F.A., Professor Emeritus Adjunct
Peggy Deamer, B.A., B.Arch., M.A., Ph.D., Professor Emerita of Architecture
Martin D. Gehner, B.Arch., M.Arch., Professor Emeritus of Architectural Engineering
Dolores Hayden, B.A., M.Arch., Professor Emerita of Architecture and Professor
Emerita of American Studies
Alexander Purves, B.A., M.Arch., Professor Emeritus of Architecture

## Professors

Sunil Bald, B.A., M.Arch., Associate Dean and Professor Adjunct Deborah Berke, B.F.A., B.Arch., M.U.P., Dean and Professor Turner Brooks, B.A., M.Arch., Professor Adjunct Anna Dyson, B.A., M.Arch., Hines Professor of Sustainable Architectural Design Keller Easterling, B.A., M.Arch., Professor Mark Foster Gage, B.Arch., M.Arch., Associate Professor Alexander Garvin, B.A., M.Arch., M.U.S., Professor Adjunct Steven Harris, B.A., B.F.A., M.Arch., Professor Adjunct John D. Jacobson, B.A., M.Arch., Professor Adjunct Bimal Mendis, B.A., M.Arch., Assistant Dean and Assistant Professor Adjunct Kyoung Sun Moon, B.S., M.S.C.E., M.Arch., Ph.D., Associate Professor Eeva-Liisa Pelkonen, M.Arch., M.E.D., Ph.D., Assistant Dean and Associate Professor Alan J. Plattus, B.A., M.Arch., Professor Elihu Rubin, B.A., M.C.P., Ph.D., Associate Professor Joel Sanders, B.A., M.Arch., Professor Adjunct Robert A.M. Stern, B.A., M.Arch., J.M. Hoppin Professor of Architecture

## **Endowed Visiting Professorships and Fellowships**

## Fall 2019

Anthony Acciavatti, Daniel Rose (1951) Visiting Assistant Professor Fernanda Canales, Louis I. Kahn Visiting Assistant Professor of Architectural Design Teddy Cruz and Fonna Forman, William Henry Bishop Visiting Professors of Architectural Design David Gissen, Eero Saarinen Visiting Professor of Architectural Design Francis Kéré, William B. and Charlotte Shepherd Davenport Visiting Professor of Architectural Design

Mary McLeod, Vincent Scully Visiting Professor of Architectural History John Spence, Edward P. Bass Distinguished Visiting Architecture Fellow Tod Williams and Billie Tsien, Charles Gwathmey Professors in Practice Elia Zenghelis, Norman R. Foster Visiting Professor

#### Spring 2020

Anthony Acciavatti, Daniel Rose (1951) Visiting Assistant Professor
Pier Vittorio Aureli, Charles Gwathmey Professor in Practice
Norma Barbacci, Robert A.M. Stern Visiting Professor of Classical Architecture
Stella Betts, Louis I. Kahn Visiting Assistant Professor of Architectural Design
Tatiana Bilbao, Norman R. Foster Visiting Professor
Walter Hood, William Henry Bishop Visiting Professor of Architectural Design
Francine Houben and Isaäc Kalisvaart, Louis I. Kahn Visiting Professors of
Architectural Design
Anupama Kundoo, William B. and Charlotte Shepherd Davenport Visiting Professor of Architectural Design
Ruth Mackenzie, Louis I. Kahn Visiting Professor of Architectural History
Cazú Zegers, Eero Saarinen Visiting Professor of Architectural Design

#### Visiting Faculty

Patrick Bellew, B.Sc., Professor Esther da Costa Meyer, B.A., M.A., Ph.D., Professor Peter Eisenman, B.Arch., M.S.Arch., M.A., Ph.D., Professor Kurt W. Forster, Ph.D., Professor Emeritus (Visiting) Graham Harman, B.A., M.A., Ph.D., Professor Henry Squire, M.A., Professor Jonathan Toews, B.A., M.Arch., Professor Anthony Vidler, B.A., Dipl.Arch., Ph.D., Professor

#### Critics, Lecturers, and Instructors

Emily Abruzzo, B.A., M.Arch., Critic Victor Agran, B.A., M.Arch., Lecturer Mohamed Aly Etman, B.Sc., M.Sc., M.Arch., Ph.D., Scientific Researcher Sarosh Anklesaria, B.Arch., M.Arch., Critic John Apicella, B.Arch., Lecturer Annie Barrett, B.A., M.Arch., Critic Anibal Bellomio, B.Arch., Lecturer Andrew Benner, B.Arch., M.Arch., Critic Phillip G. Bernstein, B.A., M.Arch., Associate Dean and Senior Lecturer Ezio Blasetti, Dipl.A.E., M.S., Lecturer John Blood, B.Arch., M.Arch., Lecturer Nikole Bouchard, B.Arch., M.Arch., Critic Kyle Bradley, B.Arch., M.Arch., Critic

Miroslava Brooks, B.S., M.Arch., Critic Brennan Buck, B.S., M.Arch., Senior Critic Luke Bulman, B.A., M.Arch., Lecturer Nathan Burnell, B.S., Instructor Kristen Butts, B.Arch.E., M.Arch.E., Lecturer Marta Caldeira, M.S., Critic Iñaqui Carnicero, B.Arch., M.Arch., Ph.D., Critic Katherine (Trattie) Davies, B.A., M.Arch., Critic Peter de Bretteville, B.Arch., M.Arch., Critic Violette de la Selle, B.S., M.Arch., Critic Kyle Dugdale, B.A., M.Arch., Ph.D., Critic Ana María Durán Calisto, B.A., M.Arch., Lecturer Alastair Elliott, B.S.C.E., M.Eng.C.E., Lecturer Martin J. Finio, B.Arch., Senior Critic Bryan Fuermann, B.A., M.A., Ph.D., M.Des.S., Lecturer David Gissen, B.S., M.Arch., Ph.D., Lecturer (spring 2020) Kevin D. Gray, B.A., M.Arch., M.B.A., Lecturer Andrei Harwell, B.Arch., M.Arch., Critic Erleen Hatfield, B.S.A.S., M.S.Civ.Eng., Lecturer Robert Haughney, B.S., Lecturer Kristin Hawkins, B.S., M.Arch., Lecturer Gavin Hogben, B.A., M.A., Critic Adam Hopfner, B.A., M.Arch., Critic Joyce Hsiang, B.A., M.Arch., Critic Alicia Imperiale, B.Arch., M.F.A., M.A., Ph.D., Critic Elisa Iturbe, B.A., M.Arch., Lecturer Michael Jacobs, B.A., M.Arch., Critic Laurence Jones, B.S., Lecturer Amir Karimpour, B.A., M.Arch., M.Des., Lecturer Dana Karwas, B.Arch., M.P.S., Lecturer Yoko Kawai, B.Eng., M.Arch., Ph.D., Lecturer Naomi Keena, Ph.D., Scientific Researcher George Knight, B.A., M.Arch., Critic Jennifer Lan, B.S.C.E., M.S.C.E., Lecturer Amy Lelyveld, B.A., M.Arch., Critic Aaron Martin, B.S., M.S., Lecturer Nicholas McDermott, B.A., M.Arch., Critic Joeb Moore, B.S., M.Arch., M.E.D., Critic Gina Narracci, B.Arch., Lecturer Timothy Newton, B.Arch., M.Arch., Critic Alan W. Organschi, B.A., M.Arch., Senior Critic Mark Peterson, B.A., M.B.A., M.Arch., Instructor Miriam Peterson, B.A., M.Arch., Critic Laura Pirie, B.Des., M.Arch., Lecturer Victoria Ponce de Leon, B.S., B.E., Lecturer

Craig Razza, B.S.M.E., Lecturer Pierce Reynoldson, B.S., M.Arch., Lecturer Kevin Rotheroe, B.S., M.Arch., M.Des.S., D.Des., Lecturer Ryan Salvatore, A.B., M.Arch., Lecturer Michael Samuelian, B.Arch., M.Arch., Lecturer Michael Surry Schlabs, B.A., M.Arch., Ph.D., Critic Aniket Shahane, B.Arch., M.Arch., Critic Edward M. Stanley, B.S., B.S.C.E., M.S.Str.E., Lecturer Beka Sturges, B.A., M.L.A., Lecturer Michael Szivos, B.Arch., M.S.A.A.D., Critic Celia Toché, B.A., M.Arch., Lecturer Adam Trojanowski, B.S., M.S., Lecturer Carter Wiseman, B.A., M.A., Lecturer

#### Administrative Staff

A.J. Artemel, Director of Communications Regina Bejnerowicz, Lead Administrator Terence Brown, Senior Administrative Assistant, Faculty Support Zelma Brunson, Operations Manager Richard DeFlumeri, Senior Administrative Assistant, Lectures and Special Events Vincent Guerrero, Director of Advanced Technology Andrei Harwell, Project Manager, Urban Design Workshop Robert Liston, Senior Systems Administrator Tanial Lowe, Registrar and Admissions Administrator Andre Massiah, Director of Financial Aid Adelia Palmieri, Senior Administrative Assistant to Registrar/Admissions and Financial Aid Offices Kate Rozen, Executive Assistant to the Dean Alison Walsh, Exhibitions Administrator Rona Walstra, Senior Administrative Assistant, Undergraduate Studies and Career Services Rosemary Watts, Senior Administrative Assistant Jill Westgard, Director of Development Donna Wetmore, Assistant Registrar and Assistant Admissions Administrator Hind Wildman, Director of Communications and Research Development for the Center for Ecosystems in Architecture Trevor Williams, IT Support Technician

#### **Robert B. Haas Family Arts Library**

Heather Gendron, M.L.I.S., Director of Robert B. Haas Family Arts Library Jennifer Aloi, B.S., Senior Administrative Assistant Dana Berkowitz, M.L.I.S., Library Services Assistant, Evening/Weekend Frank Boateng, M.B.A., M.L.S., Team Leader, Evening/Weekend Tess Colwell, M.A., M.L.I.S., Arts Librarian for Research Services Roselyn Cruz, B.A., Library Services Assistant Mar González Palacios, B.Arch., B.F.A., M.L.I.S. Associate Director, Arts Library Special Collections
Lindsay King, B.A., M.A., M.L.I.S., Assistant Director for Access and Research Services
Teresa Mensz, B.A., M.A., Library Services Assistant
William Richo, B.S., Library Services Assistant
Shawana Snell, M.S., Team Leader, Daytime
Maria Zapata, A.S., Technical Services Assistant

#### The William B. and Charlotte Shepherd Davenport Visiting Professorship

Established through the generosity of Professor Shepherd Stevens (B.F.A. 1922; M.A. Hon. 1930), this endowed chair is named in honor of Professor Stevens's uncle and aunt, William B. (B.A. 1867; M.A. Hon. 1887) and Charlotte Shepherd Davenport. Since 1966, the School has invited the following distinguished architects to join the faculty for limited periods of time under the Davenport Professorship:

James Frazer Stirling, Fall 1966-1984 Robert Venturi, Spring 1966-1970 Moshe Safdie, Spring 1971 Cesar Pelli, Spring 1972 Lewis Davis, Spring 1974 Samuel Brody, Spring 1974 Henry N. Cobb, Spring 1975 Hugh Hardy, Spring 1976 Giancarlo DeCarlo, Spring 1978 Peter Eisenman, Spring 1980 Aldo Rossi, Spring 1981 John Hejduk, Spring 1982 Helmut Jahn, Spring 1983 Paul A. Kennon, Spring 1984 Taft Architects: John Casbarian, Danny Samuels, Robert Timme, Fall 1984 Raimund Abraham, Spring 1985 Andrew MacMillan, Spring 1986 Rob Krier, Fall 1986 Mario Botta, Spring 1987 Tadao Ando, Fall 1987 Bernard Tschumi, Spring 1988 Bernard Huet, Spring 1990 Michael D. Sorkin, Fall 1990 Leon Krier and Demetri Porphyrios, Spring 1991 Mary Miss, Fall 1991 Daniel Libeskind, Fall 1992 George Baird, Spring 1993 Stanley Tigerman, Spring 1979, Fall 1993 Frank Stella and Robert Kahn, Spring 1995 Michael Wilford, Spring 1994, Fall 1995

Robert Mangurian and Mary-Ann Ray, Spring 1996 Volker Giencke, Fall 1996 Samuel Mockbee, Spring 1997 Eric Owen Moss, Fall 1994, Fall 1997 Charles Gwathmey, Spring 1999 Douglas Garofalo, Fall 2000 Michael Hopkins, Fall 2003 Jaquelin T. Robertson, Fall 2004 Demetri Porphyrios, Spring 1989, Fall 2001, Spring 2006 Richard Rogers and Chris Wise, Spring 2006 Richard Meier, Spring 2008 Brigitte Shim, Spring 2008 David M. Schwarz, Fall 2008 Lise Anne Couture, Fall 2009 Leon Krier, Fall 2002, Spring 2003, Fall 2005, Fall 2007, Fall 2009 Massimo Scolari, Fall 2006-2008, Fall 2010, Spring 2012 Elia Zenghelis, Fall 2013, Fall 2015 Hans Kollhoff, Spring 2016 Greg Lynn, Spring 2000-2003, Fall 2003, Spring 2005-2016 Tod Williams and Billie Tsien, Spring 1992, Fall 2012, Fall 2014, Fall 2016 Frank O. Gehry, Fall 1982, Fall 1985, Fall 1988, Fall 1989, Fall 1999, Fall 2017 Alan Ricks, Spring 2018 Julie Snow, Fall 2018 Pier Vittorio Aureli, Spring 2013-2014, Spring 2017-2019

#### The William Henry Bishop Visiting Professorship

The Bishop Professorship was established through the bequest of William Henry Bishop (B.A. 1867), for the appointment of a distinguished visiting architect to the faculty of the School of Architecture. Since spring 1973, when the first appointment was made to Henry N. Cobb, the following architects have held this professorship:

Sir Leslie Martin, Spring 1974 Cesar Pelli, Fall 1974 Donald Stull, Fall 1975 Noel M. McKinnell, Spring 1976 Bruce Goff, Fall 1976 David N. Lewis, Fall 1975, Spring 1977 Richard Meier, Spring 1975, Fall 1977 Henry N. Cobb, Spring 1973, Spring 1978 Robert A.M. Stern, Fall 1978 Mary Jane Long, Spring 1979 Frank O. Gehry, Fall 1979 Jaquelin T. Robertson, Spring 1980 Charles Moore, Fall 1980 Richard Weinstein, Spring 1981 Gerhard M. Kallmann, Spring 1976, Spring 1982 Arata Isozaki, Fall 1982

Jonathan Barnett, Spring 1983 Diana Agrest, Fall 1983 Stanley Tigerman, Spring 1984 Fred H. Koetter, Fall 1984 Carles Vallhonrat, Spring 1985 Ada Karmi-Melamede, Fall 1985 William Turnbull, Jr., Spring 1986 Rodolfo Machado, Fall 1986 Andres Duany and Elizabeth Plater-Zyberk, Spring 1987 Werner Seligmann, Spring 1988 George J. Ranalli, Fall 1988 Andreas Brandt, Spring 1989 John Whiteman, Fall 1989 Mario Gandelsonas, Fall 1983, Fall 1987, Fall 1990 Charles Gwathmey, Fall 1981, Spring 1991 Michael D. Sorkin, Fall 1991 Peggy Deamer, Spring 1992 Homa Fardjadi, Fall 1992 Steven Peterson, Fall 1993 Ray Huff, Fall 1994 Steven Izenour, Fall 1995 Merrill Elam, Fall 1996 Jose Antonio Acebillo, Fall 1997 Raimund Abraham, Fall 1998 Julie Eizenberg and Hendrik Koning, Spring 1999 Colin St. John Wilson, Spring 2000 Brigitte Shim, Fall 2001 Lise Anne Couture, Spring 2002 Barbara Littenberg, Fall 2004 Glenn Murcutt, Spring 2001, Fall 2002, Fall 2005 Will Bruder, Spring 2003, Spring 2006 Tod Williams and Billie Tsien, Fall 2007 Demetri Porphyrios, Fall 1999–2000, Spring 2003, Fall 2003, Spring 2005, Spring 2007-2009 Gregg Pasquarelli, Fall 2009 Sean Griffiths, Charles Holland, and Sam Jacob, Spring 2010 Bjarke Ingels and Thomas Christoffersen, Spring 2012 Diana Balmori, Fall 2008, Fall 2010, Fall 2012 Deborah Berke, Spring 2014 Thomas H. Beeby, Spring 1993-1998, Spring 2011, Spring 2013, Spring 2015 Sean Griffiths and Sam Jacob, Spring 2016 Francine Houben, Spring 2017 Julie Eizenberg, Spring 2004, Spring 2018 Simon Hartmann, Fall 2018 Thomas Phifer, Spring 2019

#### The Eero Saarinen Visiting Professorship

The Saarinen Professorship was established in 1984 through the generosity and efforts of the architect Kevin Roche in honor of Eero Saarinen, who received a B.Arch. from Yale in 1934. This endowed chair enables the School to invite a distinguished architect to teach a design studio each term. Since 1984, the following architects have held this professorship:

Kazuo Shinohara, Fall 1984 Richard Rogers, Spring 1985 James Ingo Freed, Fall 1985 Sverre Fehn, Spring 1986 William E. Pedersen, Fall 1986 Denise Scott Brown and Robert Venturi, Spring 1987 Josef Kleihues, Fall 1987 Hugh Hardy and Malcolm Holzman, Spring 1988 Michael Dennis, Fall 1988 Arduino Cantafora, Spring 1989 Mario Gandelsonas, Fall 1989 Juan Navarro-Baldeweg, Spring 1990 Henry Smith-Miller and Laurie Hawkinson, Fall 1990 Thomas Mayne, Fall 1991 Albert Pope, Spring 1992 Toshiko Mori, Fall 1992 Juhani Uolevi Pallasmaa, Spring 1993 Ada Karmi-Melamede, Fall 1993 Karen Bausman, Spring 1994 Stephen Kieran, James Timberlake, and Samuel Harris, Fall 1994 Homa Fardjadi, Fall 1995 Eric Owen Moss, Spring 1991, Spring 1996 David Turnbull, Fall 1996 Daniel Hoffman, Spring 1997 Steven Izenour, Spring 1998 Philip Johnson with Peter Eisenman, Spring 1999 Cesar Pelli, Fall 1999 Craig Hodgetts and Ming Fung, Spring 1995, Fall 2000 Andres Duany and Leon Krier, Spring 2001 Henry Smith-Miller, Fall 2001 Cecil Balmond, Fall 1998, Fall 2002 Winy Maas, Spring 2003 Rafael Viñoly, Fall 2003 Enrique Norten, Fall 2004 Zaha Hadid, Spring 2000, Spring 2002, Spring 2004, Spring 2007 Joshua Prince-Ramus and Erez Ella, Fall 2007 Francisco Mangado, Fall 2008 John Patkau, Spring 2009 Stefan Behnisch, Spring 2005–2006, Spring 2008, Fall 2009

Paul Katz, James von Klemperer, and Forth Bagley, Spring 2011
Gregg Pasquarelli, Fall 2006, Fall 2012
Angelo Bucci, Spring 2013
Brigitte Shim, Fall 2005, Fall 2010, Spring 2014
Sean Griffiths, Charles Holland, and Sam Jacob, Fall 2014
Hernan Diaz Alonso, Spring 2015
Marion Weiss and Michael Manfredi, Fall 2015
Frank O. Gehry, Spring 2008, Spring 2012, Spring 2016
James von Klemperer and Forth Bagley, Fall 2016
Patrick Bellew and Andy Bow, Spring 2010, Fall 2011, Fall 2013, Spring 2017
Elia Zenghelis, Fall 2017
Hildigunnur Sverrisdóttir, Spring 2018
Adam Yarinsky, Fall 2018
Yolande Daniels, Spring 2019

## The Louis I. Kahn Visiting Professorship

Established through the generosity of friends and admirers of Louis I. Kahn to honor his memory and service to the School. This professorship enables the School to invite distinguished architects to teach in the design studio. Since 1999, the following architects have held this professorship:

Daniel Libeskind, Fall 1999 Peter Eisenman, Fall 2001–2009, Spring 2007–2009 Tod Williams and Billie Tsien, Fall 2000, Spring 2003, Spring 2005, Fall 2010 Yvonne Farrell and Shelley McNamara, Fall 2011 Leon Krier, Spring 2013 Demetri Porphyrios, Spring 2011–2012, Fall 2013 Frank O. Gehry, Spring 2002, Spring 2004, Spring 2006, Spring 2010, Spring 2014 Pier Vittorio Aureli, Spring 2015–2016 Thomas Phifer, Spring 2017 Róisín Heneghan and Shih-Fu Peng, Fall 2012, Spring 2018 Brigitte Shim, Spring 2019

## The Louis I. Kahn Visiting Assistant Professorship

Established through the generosity of an anonymous donor, this assistant professorship enables the School to invite promising young architects to teach in the design studio and conduct seminars. Since 2004, the following architects have held this assistant professorship:

Gregg Pasquarelli, Spring 2004 Galia Solomonoff, Fall 2004 Mario Gooden, Spring 2005 Jeanne Gang, Fall 2005 Sunil Bald, Spring 2006 Marc Tsurumaki, Fall 2006 Ali Rahim, Spring 2007 Sean Griffiths, Sam Jacob, and Charles Holland, Fall 2007

Chris Sharples, Spring 2008 Liza Fior and Katherine Clarke, Spring 2009 William Sharples, Spring 2009 Eric Bunge and Mimi Hoang, Fall 2009 Chris Perry, Spring 2010 Hernan Diaz Alonso, Fall 2010 Makram el Kadi, Spring 2011 Tom Coward, Daisy Froud, Vincent Lacovara, and Geoff Shearcroft, Fall 2011 Joe Day, Spring 2012 Tom Wiscombe, Fall 2012 Adib Cure and Carie Penabad, Spring 2013 Marcelo Spina and Georgina Huljich, Fall 2013 Dan Wood, Spring 2014 Elizabeth Gray and Alan Organschi, Fall 2014 Tatiana Bilbao, Spring 2015 Sara Caples and Everardo Jefferson, Fall 2015 Kersten Geers, Spring 2016 Michael Young, Fall 2016 David Erdman, Spring 2017 Scott Ruff, Fall 2017 Florencia Pita and Jackilin Hah Bloom, Spring 2018 Omar Gandhi, Fall 2018 Todd Reisz, Spring 2019

#### The Edward P. Bass Distinguished Visiting Architecture Fellowship

Established through the generosity of Edward P. Bass (B.S. 1968, M.A. Hon. 2001), this fellowship enables the School to invite distinguished private and public sector leaders in the development community to participate as integral teaching members in advanced studios and seminars. Since 2005, the following developers have held this fellowship:

Gerald Hines, Spring 2005 Stuart Lipton, Spring 2006 Roger Madelin, Spring 2007 Nick Johnson, Fall 2007 Charles L. Atwood, Fall 2008 Katherine Farley, Spring 2010 Vincent Lo, Spring 2011 Douglas Durst, Spring 2012 Isaäc Kalisvaart, Spring 2013 John Spence, Fall 2013 Rafael Birmann, Spring 2015 Jonathan F.P. Rose, Fall 2015 Jonathan Emery, Fall 2016 Janet Marie Smith, Fall 2017 Michael Samuelian, Fall 2018

# The Vincent Scully Visiting Professorship of Architectural History

Established through the generosity of an anonymous donor to honor Vincent Scully, this professorship enables the School to invite distinguished architectural historians to give lecture and seminar courses at the School. Since 2005, the following architectural historians have held this professorship:

Kurt W. Forster, Fall 2005–2009 Dietrich Neumann, Spring 2007–2009 Stanislaus von Moos, Spring 2010–2014 Annabel Wharton, Fall 2014 Kathleen James-Chakraborty, Fall 2015–2016 Mario Carpo, Fall 2010–2013, Fall 2017 Anthony Vidler, Spring 2015–2018, Fall 2018 Esther da Costa Meyer, Spring 2019

# The Daniel Rose (1951) Visiting Assistant Professorship

Established through the generosity of Joseph B. Rose (B.A. 1981) and Gideon G. Rose (B.A. 1985) to honor their father, Daniel Rose, this assistant professorship enables the School to invite promising young scholars and practitioners to give courses in urban and environmental studies at the School. Since 2007, the following scholars have held this assistant professorship:

Elihu Rubin, Fall 2007–Spring 2012 Todd Reisz, Spring 2013–2017 Jesse LeCavalier, Spring 2018, Fall 2018, Spring 2019

# The Norman R. Foster Visiting Professorship

Established through the generosity of Norman R. Foster (M.Arch. 1962, D.F.A.H. 2003), this professorship enables the School to invite distinguished international architects to teach in the design studio. Since 2010, the following architects have held this professorship:

David Chipperfield, Fall 2011 Alejandro Zaera-Polo, Fall 2010, Spring 2012 Zaha Hadid, Spring 2013 Bijoy Jain, Fall 2013 David Adjaye, Spring 2014 John Patkau, Spring 2014, Fall 2012, Fall 2014 Niall McLaughlin, Spring 2015 Zaha Hadid and Patrik Schumacher, Spring 2016 Wolf D. Prix, Spring 2016 Marianne McKenna, Fall 2016 Gonca Paşolar and Emre Arolat, Fall 2017 Tatiana Bilbao, Spring 2017–2018 Lyndon Neri and Rossana Hu, Fall 2018 Sandra Barclay and Jean Pierre Crousse, Spring 2019

#### The Robert A.M. Stern Visiting Professorship

Established through the generosity of Robert Rosenkranz (B.A. 1962), Alexandra Munroe, and friends and colleagues in honor of Robert A.M. Stern (M.Arch. 1965), Dean of the School of Architecture from 1998 to the present, this professorship enables the School to invite distinguished architects whose design philosophies reflect the tenets of Classical architecture to teach in the design studio. Since 2015, the following architects have held this professorship:

Leon Krier, Spring 2015 Demetri Porphyrios, Fall 2015 Elizabeth Plater-Zyberk, Spring 2017 Elizabeth Moule, Spring 2018 Paul Florian, Spring 2019

# History and Objectives of the School

# HISTORY

Architecture as an art was taught at the Yale School of the Fine Arts in the late nineteenth century. Precedence for this pioneering in art education was set as early as 1832 when the Trumbull Art Gallery (the first college-affiliated gallery in the country) was opened. This event signaled a commitment to education in the arts that culminated in 1869 with the opening of the Yale School of the Fine Arts, the first college-affiliated art school in the country. The department of Architecture was established in the School of the Fine Arts in 1916. In 1959 the School of Art and Architecture, as it was then known, was made a fully graduate professional school. In 1972, Yale designated the School of Architecture as its own separate professional school.

The School of Architecture offers a three-year program leading to the degree of Master of Architecture; a two-year post-professional option also leading to the degree of Master of Architecture; a two-year program for advanced, independent research leading to the degree of Master of Environmental Design; and a program leading to a Ph.D. degree awarded by the Graduate School of Arts and Sciences. The School also supports the Yale College undergraduate Architecture major and Urban Studies major. The School of Architecture and the School of Management offer a joint-degree program leading to the degrees of Master of Architecture and Master of Business Administration (M.B.A.). The School of Architecture and the School of Forestry & Environmental Studies offer a joint-degree program leading to the degrees of Master of Architecture and Master of Environmental Management (M.E.M.).

# OBJECTIVES

The task of architecture is the creation of human environments. It is both an expression of human values and a context for human activity. Through the design process, architecture addresses the interrelated environmental, behavioral, and cultural issues that underlie the organization of built form. The student of architecture is called upon to direct sensitivity, imagination, and intellect to the physical significance of these fundamental issues in designing a coherent environment for people. Architectural design as a comprehensive creative process is the focus of the Yale School of Architecture.

The objectives of the School of Architecture reflect the view that architecture is an intellectual discipline, both an art and a profession. The program, therefore, is based on the following intentions:

- 1. to stimulate artistic sensitivity and creative powers,
- 2. to strengthen intellectual growth and the capacity to develop creative and responsible solutions to unique and changing problems, and
- 3. to help the student acquire the individual capabilities necessary for the competent practice of architecture and lifelong learning.

The School adopts as basic policy a pluralistic approach to the teaching of architecture. Students have opportunities to become well acquainted with a wide range of contemporary design approaches. The School does not seek to impose any single design philosophy, but rather encourages in each student the development of discernment and an individual approach to design.

The Yale School of Architecture offers graduate-level professional education and advanced research opportunities in architecture and allied design fields. Undergraduate majors in Architecture and Urban Studies are offered exclusively to Yale College students. In order to further the pursuit of a variety of interests within the study of architecture, the curriculum offers opportunities for study in several interrelated fields.

For the programs leading to the degree of Master of Architecture, the design studio is paramount in the School's curriculum, emphasizing the interrelationships between purpose, design, competition, collaboration, innovation, and open discussion in an environment that values risk-taking and experimentation. The design studio is a workshop in which students come together to present and discuss projects and proposals with fellow classmates, faculty, visiting critics, professionals, and the public. The design studio combines individual and group instruction, varying from desk critiques with individual faculty members, to pin-ups before several faculty members, to more formal midterm and final reviews before faculty and guest critics – all undertaken with the intention of fostering critical thinking, spatial form-making skills, and tectonic skills. Education in the design studio values leadership skills, individual creativity, and the understanding of problems and the ability to solve them as presented in the practice of architecture. The School of Architecture's mandate is for each student to understand architecture as a creative, productive, innovative, and responsible practice.

In addition to the design studios, courses in design and visualization, technology and practice, history and theory, and urbanism and landscape serve as a basis for developing a comprehensive approach to architectural design.

The area of design and visualization encompasses required studios, option studios, electives that concentrate on design logic and skills, and courses that support design thinking and representation.

Technology courses explore, as an integral part of the architectural design process, the physical context; the properties of natural forces; and building systems. In the area of practice, courses are concerned with issues related to the professional context of architecture and its practices and, in particular, with the architect's responsibility for the built environment.

Courses in history and theory examine attitudes concerning the design of buildings, landscapes, and cities that may contribute to a design process responsive to its broadest social and cultural context.

Courses in urbanism and landscape address the study of aesthetic, economic, political, and social issues that influence large-scale environments. This area deals with the relation of buildings to their urban contexts and natural environments.

Direct experience of contemporary and historical architecture and urbanism as well as firsthand contact with experts in various fields is an important part of the School's educational mission. To this end, many studios and classes incorporate both domestic and international travel as part of their course work. In addition, an intensive drawing course is offered each summer in Rome, Italy.

Urban studies are also supported through the extracurricular programs of the Yale Urban Design Workshop. Students in the School of Architecture may participate with faculty and students from the School and throughout the University in the symposia, seminars, and research and design projects organized through these programs. In particular, the Urban Design Workshop extends the work of the School into the areas of community design and outreach, providing design assistance to groups and municipalities throughout the region. (See Yale Urban Design Workshop, in the chapter Life at the School of Architecture.)

The diversity of course offerings in the School, therefore, represents a concern for design that ranges in scale from the individual building to the urban landscape. Students are also encouraged to take courses in other departments and schools in the University.

Advanced studies and research in architecture and urbanism are supported throughout the curriculum, but they are a primary focus in the M.E.D. and post-professional (M.Arch. II) programs. The M.E.D. program provides opportunities for exceptionally qualified students to pursue advanced research in architecture and urbanism through course work and independent studies guided by faculty from the School and the University. Emphasis is placed on rigorous methods of research and scholarship leading to a substantial written thesis. In the post-professional M.Arch. program, advanced studies in architecture and urbanism are supported by course work and design studios.

# Master of Architecture I Degree Program

# FIRST PROFESSIONAL DEGREE

The Master of Architecture I curriculum provides a disciplined approach to the fundamentals of architecture in a setting that ensures the flexibility and latitude necessary for students to develop their individual talents and skills.

The School believes that the educational experience of its program is enriched by students who have diverse educational backgrounds and, therefore, embraces students who in their undergraduate education have majored in a wide spectrum of disciplines, from architecture to any of the arts, sciences, or humanities. This program, leading to a degree of Master of Architecture (M.Arch.), is for students holding undergraduate liberal arts degrees, such as a B.A. or B.S., who seek their first professional architectural degree. It typically requires three years of full-time residency to complete the degree requirements.

Entering students, with a sound liberal arts background assumed, are required to follow a curriculum in which their creative powers are stimulated through a sequence of problem-solving exercises involving basic and architectural design, building technology, freehand and computer-assisted drawing, and an introduction to design methodologies, as well as courses in architectural theory and the planning, design, and development of the urban landscape. Architectural design problems in the first year start in the fall term at limited scale and by the spring term progress to an investigation of dwelling. During the spring term of first year and until mid-June, a community building project is undertaken, which provides an opportunity for the design of an affordable house as well as the experience of carrying the design through the building process when the class builds a final design. The fall term of second year undertakes the design of a public building, and the spring term of second year is devoted to urbanism. During the fall and spring terms of third year, students, through a lottery system, are at liberty to choose from a variety of advanced design studios, many of which are led by the profession's leading practitioners and theoreticians. Students may, if they wish, continue their work for an additional term by taking an advanced studio and/or elective courses. A number of support courses are required during the three-year curriculum. Required courses in design and visualization, technology and practice, history and theory, urban studies, and visual studies support the studios.

Within the limits of certain required credit distributions, students are encouraged to explore elective course options. Courses – falling into the broad categories of design and visualization, technology and practice, history and theory, and urbanism and landscape – support and augment the pivotal studio offerings. Courses offered by other schools and departments within the University may be taken for credit. Emphasis throughout the program is on architectural design and decision-making.

# Course of Study

In course titles, *a* designates fall term, *b* designates spring term, and *c* designates summer. The School reserves the right to change the prescribed course of study as necessary. The course of study listed below became effective with the first year of the 2018–2019 incoming class and the second year of the 2017–2018 incoming class. The prior listed course of study remains in effect for the first year of the 2017–2018 incoming class and for all years of the 2016–2017 incoming class.

M.Arch. I: Total Requirement: 114 credits

Pre-First Year (Mid-Summer)	
Required	Credits
1000c, Architectural Foundations*	0
First Year (Fall)	
Required	Credits
1011a, Architectural Design	9
Visualization elective	3
2011a, Structures I	3
3011a, Modern Architecture	3
	18
First Year (Spring)	
Required	Credits
1012b, Architectural Design	9
2012b, Structures II	3
2016b, Building Project I	3
3012b, Architectural Theory	3
	18
First Year (Early Summer)	
Required	Credits
2017c, Building Project II <sup>+</sup>	3
1019c, Visualization and Computation <sup>†</sup>	3
	6
	0
Second Year (Fall)	
Required	Credits
1021a, Architectural Design	9
2021a, Environmental Design	3
4011a, Introduction to Urban Design	3
Elective <sup>‡</sup>	3
	18
Second Year (Spring)	
Required	Credits
1022b, Architectural Design	9
2022b, Systems Integration	3
Elective <sup>‡</sup>	3
Elective‡	3
	18

Third Year (Fall)	
Required	Credits
Advanced Design Studio	9
2031a, Arch. Practice and Management	3
Elective <sup>‡</sup>	3
Elective#	3
	18
Third Year (Spring)	
Required	Credits
Advanced Design Studio	9
Elective <sup>‡</sup>	3
Elective <sup>‡</sup>	3
Elective‡	3
	18

\*This course is required for those students so designated by the Admissions Committee. Typically, this course will be required for students who do not have significant pre-architectural training. This five-week course begins in mid-July and concludes in mid-August.

<sup>†</sup>This course concludes in late June.

<sup>‡</sup>One elective must be a qualified Visualization elective (in addition to the required Visualization elective taken during the first year of study), two electives must be in History and Theory study area and must require at least a fifteen-page research paper, and one elective must be in Urbanism and Landscape study area. These required electives may be taken in any term(s). Courses taken outside of the School may fulfill these requirements provided they are listed in the appropriate study areas or they have been approved by the area coordinators. Students not on academic warning or probation may substitute independent elective course work. (See the School's *Academic Rules and Regulations* for procedures and restrictions.)

If an entering student can demonstrate competence and passing grades from an accredited school in the material covered in any of the program's required support courses (except for 2031a), that student may request a waiver of those courses. A waiver of any required course, however, does not reduce the number of course credits required to fulfill the program's degree requirements. Support course waivers are granted by the Curriculum and Rules Committees based upon the recommendations of the course's study area coordinators. Requests for a waiver must be submitted to one of the course's study area coordinators *within one week of the start of the first term of the student's enrollment*. A transcript, course syllabus, and a notebook or examples of work accomplished must be presented to the study area coordinators.

# Summer Preparation Courses for Incoming M.Arch. I Students

In the six weeks before the beginning of the fall term, the School offers four summer preparation courses that are required for incoming M.Arch. I students.

 Architectural Foundations (1000c). This five-week course is offered at no charge for those newly admitted students who do not have significant pre-architectural training. This course is required only for those students who have been informed in their acceptance letter that they must take this course. Students required to take the summer session must satisfactorily pass this course before being admitted to the School's first-year M.Arch I program in the fall. Classes are held each day, Monday through Friday. The average day is broken into morning and afternoon sessions. Students are expected to complete assignments outside of class.

- Summer Shops Techniques Course. This one-week course introduces incoming students to the School's fabrication equipment and shops. The course stresses good and safe shop techniques. Students are not allowed to use the School's shops unless they have satisfactorily completed this course.
- 3. Summer Digital Media Orientation Course. This two-part course, which occurs during the same week as the Summer Shops Techniques Course, covers accessing the School's servers, the use of the School's equipment, and the School's digital media policies and procedures. This course is required only for those M.Arch. I students who did not take Architectural Foundations (1000c); see paragraph 1 above.
- 4. Arts Library Research Methods Session. This ninety-minute session covers various strategies to answer research questions pertaining to course curricula and topics by using tools such as the Yale University online catalog, architecture databases, image resources, print resources, and archival resources.

# School Portfolio

In addition to the 114 satisfactorily completed course credits, a student must satisfactorily complete the portfolio requirement (as described under Academic Regulations in the chapter Life at the School of Architecture) in order to receive an M.Arch. degree. The portfolio requirement is administered and periodically reviewed by the Design Committee.

# Academic Rules and Regulations

Procedures and restrictions for the M.Arch. I program can be found in the School's *Academic Rules and Regulations* section of the *School of Architecture Handbook*. This handbook is available online at http://architecture.yale.edu/academics/school-handbook.

# National Architectural Accrediting Board (NAAB)

Following is information from the National Architectural Accrediting Board:

"In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards. Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

Yale University, School of Architecture offers the following NAAB-accredited degree program:

M. Arch. (pre-professional degree + 114 credits)

M. Arch. (non-pre-professional degree + 114 credits)

Next accreditation visit: 2021"

# Master of Architecture II Degree Program

# **POST-PROFESSIONAL DEGREE**

#### Joel Sanders, Director of Post-Professional Studies

The Master of Architecture II program is for students already holding a professional degree in architecture (B.Arch., or an equivalent first professional degree) who seek a second, master's-level degree in this discipline and who are interested in developing a stronger theoretical basis for their understanding of the field. Since candidates for this program are expected to have received a professional degree prior to admittance, it should be understood that the degree awarded from this program will not fulfill the educational prerequisite for obtaining an architect's license in the United States.

This program leads to a degree of Master of Architecture (M.Arch.) and typically requires two years of full-time residency. Because the program combines two years of studio-based activities with a variety of opportunities (both course-related and individually conceived) to extend their understanding of architectural design and its meaning within a broader cultural and social context, students in the M.Arch. II program are given considerable freedom and support to develop an increasingly reflexive, critical, and speculative relationship to their work.

With a number of courses available in the area of history and theory, and with access to a wide variety of Yale courses outside the School of Architecture, post-professional students are able to expand their understanding of the broader cultural context of architecture. Post-professional students are also given opportunities to organize symposia, exhibitions, publications, and seminars. Thus, to an exceptional degree, they are able to shape the curriculum to their own specific interests in collaboration with other students and faculty in the School.

Students in the M.Arch. II program must take Computation Analysis Fabrication (1062c) in the summer prior to beginning the program. Students take one advanced design studio, selected by lottery, in each of the first three terms; these are led by leading designers, urbanists, and theoreticians drawn from the architecture profession worldwide. Additionally, post-professional students are required to take one post-professional research seminar each term, culminating in a focused post-professional studio and symposium in the final term.

Students are encouraged to explore elective course options. Courses – falling into the broad categories of design and visualization, technology and practice, history and theory, and urbanism and landscape – support and augment the pivotal studio offerings. Courses offered by other schools and departments within the University may be taken for credit.

# Course of Study

In course titles, *a* designates fall term, and *b* designates spring term. The School reserves the right to change the prescribed course of study as necessary.

M.Arch. II: Total Requirement: 72 credits

First Year (Summer) Required	Credits
1062c, Computation Analysis Fabrication	0
First Year (Fall) Required	Credits
Advanced Design Studio	9
3072a, Design Research I	3
Elective*	3
Elective*	3
	18
First Year (Spring)	
Required	Credits
Advanced Design Studio	9
3073b, Design Research II	3
Elective*	3
Elective*	3
	18
	10
Second Year (Fall)	
Required	Credits
Advanced Design Studio	9
3074a, Design Research III†	3
Elective*	3
Elective*	3
	18
Second Year (Spring)	
Required	Credits
1121b, Design Research IV: Studio	9
Elective* Elective*	3
Elective*	3
Elective	3
	18

\*Students not on academic warning or probation may substitute independent elective course work. (See the School's *Academic Rules and Regulations* for procedures and restrictions.)

<sup>+</sup>For students who matriculated in 2018, the required course is 3071a, Issues in Architecture and Urbanism.

# Summer Preparation Courses for Incoming M.Arch. II Students

In the five weeks before the beginning of the fall term, the School offers four preparation courses that are required for incoming M.Arch. II students.

- Computation Analysis Fabrication (1062c). This four-week course introduces students to cutting-edge techniques for 3-D modeling complex geometries and then translating these forms into built work through the use of CNC mills, laser cutters, waterjet cutting, and 3-D printing, among other fabrication technologies.
- Summer Shops Techniques Course. This one-week course introduces incoming students to the School's fabrication equipment and shops. The course stresses good and safe shop techniques. Students are not allowed to use the School's shops unless they have satisfactorily completed this course.
- 3. Summer Digital Media Orientation Course. This two-part course, which occurs during the same week as the Summer Shops Techniques Course, covers accessing the School's servers, the use of the School's equipment, and the School's digital media policies and procedures.
- 4. Arts Library Research Methods Session. This ninety-minute session covers various strategies to answer research questions pertaining to course curricula and topics by using tools such as the Yale University online catalog, architecture databases, image resources, print resources, and archival resources.

# School Portfolio

In addition to the 72 satisfactorily completed course credits, a student must satisfactorily complete the portfolio requirement (as described under Academic Regulations in the chapter Life at the School of Architecture) in order to receive an M.Arch. degree. The portfolio requirement is administered and periodically reviewed by the Design Committee.

# Academic Rules and Regulations

Procedures and restrictions for the M.Arch. II program can be found in the School's *Academic Rules and Regulations* section of the *School of Architecture Handbook*. This handbook is available online at http://architecture.yale.edu/academics/school-handbook.

# Master of Environmental Design Degree Program

### **RESEARCH-BASED THESIS PROGRAM**

#### Keller Easterling, Director of M.E.D. Studies

The Master of Environmental Design program is a two-year research-based program of advanced architectural studies culminating in a written thesis or independent project. This full-residency program leads to a degree of Master of Environmental Design (M.E.D.). This is a nonprofessional degree and does not fulfill prerequisites for licensure.

The program is intended for students, including postgraduate and mid-career professionals, who seek an academic setting to improve scholarship and research skills, to explore a professional or academic specialization, and to sharpen critical and literary expertise. The program provides foundation for a career in writing, teaching, curatorial work, or critically informed professional practice, and may, in some cases, provide a basis for future Ph.D. studies in architecture and related fields. During their studies, students are encouraged to take advantage of the School's programs and resources, including teaching; symposia; and curatorial, editorial, and archive research projects.

The M.E.D. program is aimed at qualified applicants with a graduate or undergraduate degree in architecture or other disciplines who exhibit a strong capability for and interest in independent research. The main criterion for admission to the program is a well-defined research proposal for independent study that engages one or more of the study areas listed below. The proposal should outline a study plan that the candidate can accomplish in four academic terms and that can be supported by faculty expertise available to students in the M.E.D. program.

For more information on the M.E.D. program, its history, and current and past thesis projects, visit "M.E.D." under Academic Programs at http://architecture.yale.edu.

# Areas of Study

Environmental Design is broadly defined as the study and research of the aggregate of objects, conditions, and influences that constitute the constructed surroundings. Those studying in the M.E.D. program are encouraged to understand the larger cultural and intellectual factors – social, political, economic, technical, and aesthetic – that shape the environment. The M.E.D. program fosters an interdisciplinary approach to architectural research, which takes advantage of the extensive array of resources at Yale University.

The program supports research at the intersection of theory and practice. The three areas listed below indicate recent research topics as well as the scholarly expertise of students and faculty in the M.E.D. program. Students are encouraged to engage in a wide array of methodologies, tools, and topics.

History, Theory, and Criticism of Architecture and Urbanism: History and theory of architecture and urbanity; architectural criticism; history of building types; study of design methods; contemporary architectural culture.

*Ecologies and Economies of the Built Environment:* Study of the ecological, economic, and cultural forces that shape the environment; globalization and its effect on built

landscapes; infrastructures and settlement patterns; urban geography; notation and mapping techniques.

*Multimedia Research:* Digital media as a tool and subject of research; use of digital tools in fabricating building components and visualizing data; study of network geography and infrastructure.

*Visual Studies:* Visual communication and representation; exhibition technologies and curatorial strategies; role of various media in shaping architectural culture; notation and mapping techniques; design research.

# Course of Study

In course titles, *a* designates fall term, and *b* designates spring term. The School reserves the right to change the prescribed course of study as necessary.

The program of study is a combination of required classes, electives, and independent research. A total of 72 credits is required for completion of the M.E.D. program, allocated as 18 credits each term. A minimum of 21 credits is assigned to electives and 6 to the required M.E.D. courses. A maximum of 45 credits is assigned to independent research (3092a or b). The electives and course distribution are determined in consultation with the student's primary adviser and the director of the program.

## COURSE REQUIREMENTS FOR THE M.E.D. PROGRAM

M.E.D. students are required to take a course in research methodologies (3091a) in the fall term of their first year and a course in architectural theory (3012b) in the spring term of their first year. All other course work is distributed among electives chosen from School of Architecture and other Yale University courses. (See descriptions of courses in the M.Arch. curriculum as well as in the bulletins of other schools of Yale University and online at Yale Course Search, http://courses.yale.edu.) All M.E.D. students are required to take 3092a or b each term to develop their independent project.

Note: Design studios offered in the M.Arch. program are closed to M.E.D. students. Exceptions are considered only if the design studio is directly related to a student's research, and are subject to approval by the M.E.D. program director, the dean, and the studio instructor.

M.E.D.: Total Requirement: 72 credits

First Year (Fall)	
Required	Credits
3091a, Methods and Research Workshop	3
3092a, Independent Research and Electives	15
	18
First Year (Spring)	
Required	Credits
3012b, Architectural Theory	3
3092b, Independent Research and Electives	15
	18

Second Year (Fall)	
Required	Credits
3092a, Independent Research and Electives	18
Second Year (Spring)	
Required	Credits
3092b, Independent Research and Electives	18

# Summer Preparation Courses for Incoming M.E.D. Students

In the week before the beginning of the fall term, the School offers two preparation courses that are required for incoming M.E.D. students.

- Summer Digital Media Orientation Course. This half-day orientation covers accessing the School's servers, use of the School's equipment, and the School's digital media policies and procedures.
- 2. Arts Library Research Methodology Course. This course covers research methodologies and tools specific to the M.E.D. curriculum.

# Advisers and M.E.D. Program Committee

Students work closely with one or two advisers on their independent project. Advisers are primarily drawn from the School of Architecture faculty; additional advisers are drawn from other departments at the University as appropriate to the field of study. The following faculty members serve on the M.E.D. committee, which reviews all independent work each term.

Keller Easterling, Chair Eeva-Liisa Pelkonen Alan Plattus Elihu Rubin

# Academic Rules and Regulations

Four terms must be spent in residence. Under exceptional circumstances, and with permission of the dean and the School's Rules Committee, students may apply for half-time status (9 credits per term), after successful completion of the first term (18 credits). The in absentia tuition fee is \$250 per term. Additional procedures and restrictions for the M.E.D. program can be found in the School's *Academic Rules and Regulations* section of the *School of Architecture Handbook*. This handbook is available online at http:// architecture.yale.edu/academics/school-handbook.

# Doctor of Philosophy Program

Alan Plattus, Director of Doctoral Studies

# FIELDS OF STUDY

The doctoral program prepares candidates for careers in university teaching, cultural advocacy and administration, museum curatorship, and publishing. It aims chiefly, however, to educate teachers capable of effectively instructing future architects in the history of their own field and its manifold connections with the culture at large. The program forges a unique combination of professional knowledge with a historical and analytical grasp of key phases in the history of architecture, especially those that have a demonstrable share in the field's current state and the critical issues it faces.

The program secures sound training in historical study and historiography, imparting technical knowledge and awareness of intellectual trends that inform the reception and role of architecture around the world. The history of science and technology (as well as its reception in popular culture and the arts), the history of media, and an understanding of architectural practice are as important as the fine arts and literature.

# ADMISSION REQUIREMENTS

Applicants must have appropriate academic credentials (a master's degree or equivalent in architecture, engineering, environmental design, or, exceptionally, in a related field). Two years of professional work in an architecture office are recommended. The Graduate Record Examination (GRE) General Test taken no more than five years prior to application is required. All applicants whose native language is not English are required to take the Internet-based Test of English as a Foreign Language (TOEFL iBT), a test that includes a section on spoken English. The TOEFL requirement may be waived only for applicants who, prior to matriculation at Yale, will have received a baccalaureate degree or its international equivalent from a college or university where English is the primary language of instruction. Applicants must have studied in residence at the baccalaureate institution for at least three years to receive the waiver. A waiver will not be granted on the basis of an advanced degree (such as M.A., M.S., or Ph.D.) from any institution.

In addition to meeting qualifying criteria, candidates are required as part of the application to submit a portfolio of their own architectural work, a writing sample in the form of a substantial research paper or publication, and an explanation of their motivation for engaging in this course of study. Qualified applicants may be invited to interview with a member of the doctoral faculty.

The portfolio should be a well-edited representation of the applicant's creative work. Portfolios may not contain videos. Anything submitted that is not entirely the applicant's own work must be clearly identified as such.

The portfolio is submitted digitally as a single pdf document optimized not to exceed 20MB; it will need to be uploaded to the online application. Pages of the pdf portfolio should be uploaded as spreads. The digital portfolio will be viewed on computer screens, so resolution above 150 dpi is not necessary.

The Ph.D. program is administered by the Yale Graduate School of Arts and Sciences. For questions regarding admissions, please contact graduate.admissions@yale.edu.

#### THE APPLICATION PROCESS

The online application can be accessed at http://gsas.yale.edu/admission-graduate-school, when it is available. Applications for the program beginning in the 2020–2021 academic year must be submitted no later than January 2, 2020. Applicants will not be allowed to submit applications after the deadline has passed.

#### SPECIAL REQUIREMENTS FOR THE PH.D. DEGREE

Entering students with sound professional preparation engage in a concerted course of study that leads directly to dissertation research and a doctoral degree.

Students are required to be full-time and in residence in the New Haven area during the first three academic years (see the Bulletin of the Graduate School of Arts and Sciences, *Programs and Policies*). Students take twelve graduate and Ph.D. seminars for credit, including a Ph.D. seminar taught in each of the first four terms by a member of the School of Architecture faculty that introduces the student to various methodologies and areas of study. Some seminars encourage primary research on a narrow topic or focus on producing a collective body of work. Others offer a broader survey of historiographies or focus on a close reading of a body of texts. These four required seminars form the methodological core of the program.

Students are encouraged to take courses related to their specific areas of interest outside the School of Architecture. For example, a student working on Italian modernism would be encouraged to take a course in Italian history or literature. Typically, at least two of the eight elective seminars would be in related fields. Students can also opt to do independent readings with individual faculty members on their specific areas of interest.

Not later than the end of their second year, students are also expected to demonstrate competence in at least one foreign language relevant to their field of study. Language competence is more than a formality and requires some acquaintance with the literature in the chosen language. Competency may be determined by a grade of B or better in a yearlong intermediate-level language course or through examination.

The student's field of interest is defined by the end of the second year, at which time the director of doctoral studies assigns the student an adviser, who may or may not be from the School of Architecture. At the end of the second year and after the student has taken the three oral examinations, the director of doctoral studies, in consultation with the student's adviser, appoints a dissertation committee for the student. The dissertation committee consists of the student's adviser plus two additional faculty members. One of the dissertation committee members should be from outside the School of Architecture, with selection based on the student's area of interest. The dissertation committee guides and monitors the student's progress in writing the dissertation and evaluates the dissertation upon completion.

By the end of their second year, doctoral students normally complete all course and language requirements. Oral examinations are taken on topics relevant to the student's doctoral research. Examiners question the candidate in the presence of the director of doctoral studies and the thesis adviser.

During the third year, candidates present and defend a preliminary proposal for a dissertation topic, consisting of a topic statement, detailed program of research, and an annotated bibliography. By the end of the third year, students begin dissertation research and writing, submitting drafts of the dissertation chapters as they are completed.

While this is a five-year program, if the dissertation has not been completed by the end of year five and, at that time, the program certifies that the candidate will complete the dissertation by August of the following academic year, the candidate may be eligible in year six for a teaching position and funding for up to an additional nine months.

## Graduate Research Assistant and Teaching Fellow Experience

The program in Architecture considers teaching to be an important part of graduate training. Students in the Ph.D. program in Architecture, therefore, are expected to teach for four terms, normally in their third and fourth years. During these four terms, it is anticipated that a Ph.D. student teach in two history and theory survey courses in the student's area of study at the School of Architecture or elsewhere in the University and teach in two design studios at the School of Architecture. Each teaching assignment shall be under the direct supervision of senior faculty.

## MASTER'S DEGREE

**M.Phil.** The Master of Philosophy degree is awarded en route to the Ph.D. The minimum requirements for this degree are that a student has completed all requirements for the Ph.D., except the teaching fellow experience and the dissertation.

## **REQUIRED COURSES**

**551a**, **Ph.D. Seminar I** 1 credit. (Required in, and limited to, Ph.D. first year, fall term.) This seminar centers on a thorough examination of fundamental ideas of historiography, centering on Rome and exploring aspects of geology, culture, mapping, site development, the establishment of institutions, and the construction of buildings across several millennia, as well as a study of literature on the *urbs* and its worldwide impact. Faculty

**552b**, **Ph.D. Seminar II** 1 credit. (Required in, and limited to, Ph.D. first year, spring term.) This seminar centers on concepts of history and their application to architecture from Jacob Burckhardt to the present and a close reading of historiographic theories, including ethnography, modernity, and the emergence of the profession of architecture in the light of present-day critique. Faculty

**553a, Ph.D. Seminar III** 1 credit. (Required in, and limited to, Ph.D. second year, fall term.) Seminar content to be announced. Faculty

**554b**, **Ph.D. Dissertation Preparation** 1 credit. (Required in, and limited to, Ph.D. second year, spring term.) Ph.D. tutoring in preparation for oral examinations and formulation of a thesis topic. Faculty

## Summer Preparation Courses for Incoming Ph.D. Students

In the week before the beginning of the School of Architecture fall term, the School of Architecture offers two preparation courses that are required of incoming Ph.D. students.

- 1. Summer Digital Media Orientation Course. This half-day orientation covers accessing the School's servers, use of the School's equipment, and the School's digital media policies and procedures.
- 2. Arts Library Research Methodology Course. This course covers research methodologies and tools specific to the Ph.D. curriculum.

## Joint-Degree Programs and Undergraduate Studies

#### JOINT-DEGREE PROGRAMS

## School of Architecture/School of Management

#### Phillip G. Bernstein, Coordinator

The Yale School of Architecture and the Yale School of Management offer a joint-degree program in Architecture and Management. This program is especially oriented to individuals who wish to integrate the design, urban development, and management professions in pursuing careers in government or the private sector.

Joint-degree students in the three-year first professional M.Arch. program must complete all requirements for the degree, including six terms of design studio, with the first four terms taken consecutively. This is an accredited, professional degree and specific requirements may not be bypassed, except when waivers are granted for course work previously completed at other institutions. Students in this program will have their overall number of course credits required for the M.Arch. degree reduced from the normal 114 credits to 96 credits. This means they will take 18 fewer elective credits (six elective courses) and may be waived from the History and Theory and/or Urbanism and Landscape elective requirements. Normally this adjustment will allow the student to divide the final (fourth) year schedule between the two required advanced studios at the School of Architecture and courses at the School of Management.

Joint-degree students in the two-year post-professional M.Arch. program must complete 54 credits in the School of Architecture, including three advanced studios and the post-professional research studio (1121b). They will complete the joint-degree program in three years, normally consisting of one full year in each school and a final year divided between the two schools.

At the conclusion of the required studies, the joint-degree program awards both a Master of Business Administration (M.B.A.) and a Master of Architecture (M.Arch.). Withdrawal or dismissal from the School of Management will automatically obligate a student to complete all normal requirements for the M.Arch. degree (114 credits for first professional degree; 72 credits for post-professional degree option). The M.Arch. degree will not be awarded to joint-degree candidates until they have completed all requirements for both degrees.

Admissions are determined independently by the two schools. Students may apply to both schools at the same time and, if accepted, will begin their studies at the School of Architecture, since admission to the School cannot be deferred; or they may apply to the School of Management prior to their final year at the School of Architecture. Students enrolled at the School of Management may apply to the School of Architecture during their first year. Those who apply simultaneously should so indicate on both applications. Applications to the School of Architecture must be approved by the committee of the joint-degree program. Inquiries may be directed to the registrar at the School of Architecture and to the director of student services at the School of Management.

## School of Architecture/School of Forestry & Environmental Studies Elisa Iturbe, Coordinator

The Yale School of Architecture and the Yale School of Forestry & Environmental Studies offer a joint-degree program in Architecture and Environmental Management. This program is directed to individuals who wish to become leaders in sustainable architecture and ecological design, with a focus on the integration of ecological science, energy systems, and global urbanization patterns with architecture and urbanism. Capitalizing on the breadth and depth of expertise at the School of Forestry & Environmental Studies in ecosystem ecology, land change science, environmental economics, industrial ecology, and ecological anthropology, this program fosters students who can innovatively merge ecological science with architecture at the site, city, and regional scales. The joint-degree program offers a focused and restricted curriculum that enables a student to obtain both a Master of Architecture (M.Arch.) degree and a Master of Environmental Management (M.E.M.) degree one year earlier than would be required if each degree were pursued independently; that is, in four years if admitted to the first professional Master of Architecture (M.Arch. I) program, or in three years if admitted to the second professional Master of Architecture (M.Arch. II) program.

Individuals seeking admission to this joint-degree program must apply and be admitted to one of the two School of Architecture Master of Architecture programs (M.Arch. I or M.Arch. II) and also apply and be admitted separately to the School of Forestry & Environmental Studies Master of Environmental Management program. Consequently, applicants must submit all required admissions materials and prerequisites for application to each of these programs, indicating their desire to be, in addition, considered for the joint program.

Students may apply to both schools at the same time and, if accepted, will begin their studies at the School of Architecture, since admission to the School cannot be deferred. Those who apply simultaneously should indicate their desire to be considered for the joint program on both applications. Students at the School of Architecture may apply to the School of Forestry & Environmental Studies prior to their final year. Students enrolled at the School of Forestry & Environmental Studies may apply to the School of Architecture or the School of Forestry & Environmental Studies may apply to the School of Architecture or the School of Forestry & Environmental Studies. Withdrawal or dismissal from the School of Forestry & Environmental Studies will automatically oblige a student to complete all normal requirements for the School of Architecture M.Arch. degree (114 credits for first professional degree; 72 credits for post-professional degree option). Furthermore, the M.Arch. degree will not be awarded to joint-degree candidates until they have completed all requirements for both degrees.

#### MASTER OF ARCHITECTURE I— MASTER OF ENVIRONMENTAL MANAGEMENT

Joint-degree students admitted to the first professional Master of Architecture (M. Arch. I) program must complete all requirements for this degree as specified in the Course of Study listed below. The Master of Architecture degree for this program is an accredited, professional degree and specific requirements may not be bypassed, except

when waivers are granted for course work previously completed at other institutions. Students in this program will have their overall number of course credits required for the Master of Architecture degree reduced from the normal 114 credits to 96 credits and for the Master of Environmental Management degree reduced from the normal 48 credits to 36 credits by, in effect, satisfying what would have been elective requirements in one program with required courses of the other. Students in the joint-degree program may be waived from the History and Theory and/or Urbanism and Landscape elective requirements.

Joint students within the Master of Architecture program may waive specific course requirements if they have taken equivalent courses at other institutions, although total credit requirements will not be altered.

The joint-degree curriculum is composed of core courses and electives in both Schools, plus two short summer courses in visualization and technical skills training, two summer internships, and the School of Architecture's first-year building project.

## Course of Study\*

96 credits from School of Architecture and 36 credits from School of Forestry & Environmental Studies.

#### First Year

At School of Architecture: all required courses of the first-year M.Arch. I program

#### Second Year

- At School of Architecture: all required courses, except only one elective, of the secondyear M.Arch. I program
- At School of Forestry & Environmental Studies: Perspectives course, Basic Knowledge course, summer technical skills training (MODS), summer internship

#### Third Year

At School of Architecture: one advanced studio<sup>+</sup>

At School of Forestry & Environmental Studies: Basic Knowledge course, Specialization core and electives, general electives, summer internship

#### Fourth Year

- At School of Architecture: one advanced studio<sup>+</sup>; 2031a, Architectural Practice and Management
- At School of Forestry & Environmental Studies: Specialization and general electives, Capstone course, Integrative Project
- \*Once accepted into the joint-degree program, candidates should consult with the program's coordinator to determine a more definitive course of study. The Schools reserve the right to change the prescribed course of study as necessary.
- <sup>†</sup>Unless approved otherwise by the program's coordinator, one of the required advanced studios must be a sustainability-designated studio.

#### MASTER OF ARCHITECTURE II — MASTER OF ENVIRONMENTAL MANAGEMENT

Joint-degree students admitted to the second professional Master of Architecture (M.Arch. II) program must complete all requirements for this degree as specified in the Course of Study listed below. The Master of Architecture degree for this program is a non-accredited degree. Students in this program will have their overall number of course credits required for the Master of Architecture degree reduced from the normal 72 credits to 54 credits, including two advanced studios, the post-professional design studio (1121b) and the advanced sustainable design studio, and for the Master of Environmental Management degree reduced from the normal 48 credits to 36 credits by, in effect, satisfying what would have been elective requirements in one program with required courses of the other.

The joint-degree curriculum is composed of core courses and electives in both Schools, plus one short summer course in technical skills training and one summer internship.

### Course of Study\*

54 credits from School of Architecture and 36 credits from School of Forestry & Environmental Studies

#### First Year

At School of Architecture: all required courses of the first-year M.Arch. II program<sup>+</sup>

At School of Forestry & Environmental Studies: summer technical skills training (MODS)

#### Second Year

At School of Architecture: all required courses of the second-year M.Arch. II program<sup>+</sup> At School of Forestry & Environmental Studies: Perspectives course, Basic Knowledge courses, summer internship

#### Third Year

- At School of Forestry & Environmental Studies: Specialization core and electives, general electives, Capstone course, Integrative Project
- \*Once accepted into the joint-degree program, candidates should consult with the program's coordinator to determine a more definitive course of study. The Schools reserve the right to change the prescribed course of study as necessary.
- <sup>†</sup>Unless approved otherwise by the program's coordinator, one of the required advanced studios must be a sustainability-designated studio.

## M.Arch./M.E.D.

Yale School of Architecture students who are enrolled in the M.Arch. program and who are interested in continued advanced study in an area of specialization in architecture, environmental design, or planning/development, may apply for admission to the M.E.D. program. Students may take courses supporting areas of advanced study during the M.Arch. curriculum and, after receipt of the M.Arch. degree, may qualify for up to one term's advanced standing in the M.E.D. degree program.

## UNDERGRADUATE STUDIES

## Bachelor of Arts

The School offers an undergraduate major in Architecture and an undergraduate major in Urban Studies exclusively to students enrolled in Yale College. Students who desire either major must apply directly to Yale College. For additional information and full course descriptions, see *Yale College Programs of Study*, online at http://catalog.yale.edu/ycps.

#### ARCHITECTURE MAJOR

Bimal Mendis, Director of Undergraduate Studies, Architecture

The purpose of the undergraduate major is to include the study of architecture within a comprehensive liberal arts education, drawing from the broader academic and professional environment of the Yale School of Architecture. The curriculum includes work in design; in history, theory, and criticism of architecture; and in urban studies. As a liberal arts major in Yale College, it leads to a bachelor of arts degree with a major in Architecture, a nonprofessional degree, and it does not fulfill the prerequisites for architectural licensure. For accredited professional degree programs, refer to the requirements of the National Architectural Accrediting Board (NAAB) at www.naab.org.

#### Introductory Courses

The introductory courses to the study of architecture (ARCH 150, 200, and 280) are open to all Yale College students and are required prior to applying for the Architecture major. With permission of the director of undergraduate studies (DUS), the prerequisites may be waived for students with sufficient experience in architecture or in relevant subjects.

#### Declaration of Intent to Major

Yale College students interested in the Architecture major must submit a Declaration of Intent to Major during the spring term of their sophomore year, after taking ARCH 150, 200, and 280. The Declaration of Intent to Major must be submitted to the office of the DUS no later than 4 p.m. on March 27, 2020, in 328 Rudolph (third floor), and must include the following information: name, address, telephone number, courses related to architecture already taken, and a statement of purpose. Students should also indicate their desired concentration at this time. Additionally, by May 1, 2020, students must submit an electronic portfolio representative of course work for ARCH 150, 200, and a paper from ARCH 280. Upon the successful completion of these requirements, students are notified in writing regarding their acceptance to the major by May 31, 2020.

#### **Requirements of the Major**

To graduate as a Yale College major in Architecture, a student must complete fifteen course credits, including the three prerequisites and the senior requirement. They must also base their studies in one of three areas of concentration:

 Design, which explores the role of architecture in shaping the world around us. It introduces complex processes involved in solving spatial and programmatic problems. Creative work is grounded in the study of history and culture, and in the analysis of social conditions influencing architecture. Design studios provide a forum for production and discourse. Studio projects address issues of architectural form, space, composition, site, tectonics, and programs within broader humanistic ideals.

- 2. History, Theory, and Criticism, which is intended to establish a broad historical and intellectual framework for the study of architecture. An interdisciplinary approach is encouraged through additional courses taken in various fields of humanities and social sciences. Normally these interdisciplinary courses address subjects closely linked to architectural history, theory, and criticism. Such courses may include archaeology, history of religion, aesthetics, philosophy, or visual culture.
- 3. Urbanism, which encourages a broad, interdisciplinary investigation of the complex forces that shape the urban and physical environment.

For the senior requirement, seniors in the Design track take ARCH 450 in the fall term and ARCH 494 in the spring term. Seniors in the History, Theory, and Criticism track and in the Urbanism track take ARCH 490 in the fall term and ARCH 491 in the spring term. Proposals for senior projects and essays are submitted in the fall term for review and approval by the senior project coordinator; they are then distributed to faculty members for review. Upon successful review, students may ask faculty members to act as senior advisers. Senior essays and projects for ARCH 491 are due in the office of the DUS by April 10, 2020. Design projects for ARCH 494 are due as specified by the course instructor. All seniors must submit a portfolio of their work to the office of the DUS by May 1, 2020. For all Architecture majors, this portfolio must be representative of the student's design work including prerequisites and the senior project. History, Theory, and Criticism majors and Urbanism majors must also include a copy of the senior essay and other appropriate texts.

#### URBAN STUDIES MAJOR

Joyce Hsiang, Director of Undergraduate Studies, Urban Studies

Urban Studies is an interdisciplinary field grounded in the physical and social spaces of the city and the larger built environment. The Urban Studies major is situated within Yale's liberal arts framework and draws on the broader academic context and expertise of the Yale School of Architecture, including the areas of urban design and development, urban and architectural history, urban theory and representation, globalization and infrastructure, transportation and mobility, heritage and preservation, and community-based planning. The major introduces students to the following bodies of knowledge: history, theory and contemporary analysis of urban morphologies, spaces, societies, and political economies; conceptual tools and analytical methods to understand urban environments and issues through spatial terms; and practices of and speculative approaches to urban planning and design.

The major prepares undergraduates for a variety of future careers and fields of graduate study related to urban planning, design, and development. These include professional and practice-oriented fields such as urban planning, law, nonprofit management, public policy, real estate development, and architecture; as well as research-oriented fields such as geography, sociology, anthropology, urban planning, and architecture.

#### Declaration of Intent to Major

Students may declare their intent to major during their second year. The intent to major process will include meeting with the director of undergraduate studies (DUS) to discuss the intended course of study; submitting a Declaration of Intent to Major form and

completing the surveys by the end of the second year. More information regarding this process, the relevant forms, and submission link is available on the program's website. Schedules for majors must be discussed with, and approved by, the DUS in Urban Studies. Only then may a schedule be submitted to the residential college dean's office.

#### **Requirements of the Major**

To graduate as a Yale College major in Urban Studies, a student must complete thirteen course credits approved by the DUS, including three survey courses, three methods courses, five or six electives depending on the senior requirement; and a one- or two-term senior requirement. The two senior requirement options are:

- 1. A yearlong senior project, which includes the Senior Research Colloquium (ARCH 490) in the fall and Senior Project (URBN 491) in the spring. The senior project may be a written paper or a project that could encompass a variety of media. The primary adviser must be a member of the architecture faculty.
- 2. A final paper of twenty to twenty-five pages produced in an advanced seminar, selected in consultation with the DUS. Students pursuing this option will also have to take an additional elective course.

# Study Areas and Course Descriptions, 2019–2020

In course titles, *a* designates fall term, *b* designates spring term, and *c* designates summer. [Bracketed courses are not offered in 2019-2020.] The School reserves the right to change the prescribed course of study as necessary.

#### DESIGN AND VISUALIZATION

Brennan Buck and Mark Foster Gage, Study Area Coordinators

This study area encompasses required studios, elective advanced studios, and courses that concentrate on design logic and skills and that support design thinking and representation.

For the M.Arch. I program, required courses in this study area include a core sequence of four design studios, two advanced studios, and two visualization elective courses; one of these visualization electives must be completed in the fall term of the first year. The core studio sequence progresses from spatially abstract exercises to more complex programs that require integrative thinking at various scales and situated on sites of increased complexity, while integrating ecological, landscape, and tectonic demands. The first course (1000c) is a summer course required for entering students who have not had significant prior architectural training. A further visualization course (1019c) – in the early summer of the first year – is required of all M.Arch. I students.

For the M.Arch. II program, required courses in this study area include three advanced studios, design research studio (1121b), and a course in computation analysis and fabrication (1062c).

## **Required** Courses

**1000C**, Architectural Foundations o credits. (Required of incoming M.Arch. I students with little or no academic background in architecture.) This summer course is an intensive, five-week immersion into the language of architectural representation and visualization, offering a shared inventory and basic framework upon which to build subsequent studies. Students are introduced to techniques and conventions for describing the space and substance of buildings and urban environments, including orthographic drawing, axonometric projection, perspective, architectural diagramming, vignette sketching, and physical modeling. Students work in freehand, hard-line, and digital formats. In parallel to the visualization portion of this course, an introduction to architectural history and theory focuses on principal turning points of thought and practice through to the eighteenth century. For 2019 the course was taught from July 15 until August 16. Miroslava Brooks, coordinator; John Blood, Kyle Dugdale

**1011a, Architectural Design: First M.Arch. I Core Studio** 9 credits. (Required of firstyear M.Arch. I students.) This studio is the first of four core design studios where beginning students bring to the School a wide range of experience and backgrounds. Exercises introduce the complexity of architectural design by engaging problems that are limited in scale but not in the issues they provoke. Experiential, social, and material concerns are introduced together with formal and conceptual issues. Brennan Buck, coordinator; Nikole Bouchard, Miroslava Brooks, Joyce Hsiang, Nicholas McDermott, Michael Szivos

**1012b, Architectural Design: Second M.Arch. I Core Studio** 9 credits. (Required of first-year M.Arch. I students.) This second core studio continues to extend spatial exploration into the conception and design of a building through studies of scale, site, program, and materiality. The term is organized by a series of projects that culminate with the design of a building that engages both public and private space. Prerequisite: 1011a. Miriam Peterson, coordinator; Peter de Bretteville, Elisa Iturbe, Amy Lelyveld, Joeb Moore, Eeva-Liisa Pelkonen

**1019c**, **Visualization and Computation** 3 credits. (Required of first-year M.Arch. I students, early summer. No waivers allowed.) This seven-week intensive course covers the fundamentals and implications of four specific sets of digital software and skills: building information modeling (BIM); virtual realities; image making; and scripting and algorithmic design. Each section is taught by a different instructor who brings specific experience to both tutorials and discussions on the broader impact of computation on the field. For 2020 the course will be taught from May 11 until June 26. Faculty

**1021a**, **Architectural Design: Third M.Arch. I Core Studio** 6 credits. (Required of second-year M.Arch. I students.) This third core studio concentrates on a medium-scale public building, focusing on the integration of composition, site, program, mass, and form in relation to structure, and methods of construction. Interior spaces are studied in detail. Large-scale models and drawings are developed to explore design issues. Pre-requisite: 1012b. Emily Abruzzo, coordinator; Annie Barrett, Iñaqui Carnicero, Peter de Bretteville, Gavin Hogben

**1022b, Architectural Design: Fourth M.Arch. I Core Studio** 9 credits. (Required of second-year M.Arch. I students.) This fourth and final M.Arch I core studio expands on the fundamental architectural skills introduced in the previous three terms to examine the role of architecture and the architect at the scale of the city. Extending beyond the bounds of a building, this course examines a variety of forces – architectural, urban, social, economic, ecological, political, and other – that shape and order our built environment, emphasizing and cultivating a range of architectural themes and skills. Prerequisite: 1021a. Aniket Shahane, coordinator; Anthony Acciavatti, Alicia Imperiale, Bimal Mendis, Alan J. Plattus

**1062c, Computation Analysis Fabrication** o credits. (Required of and limited to entering first-year M.Arch. II students in the summer before their first term.) This course investigates and applies emerging computational theories and technologies through the design and fabrication of a full-scale building component and/or assembly. This investigation includes various static, parametric, and scripted modeling paradigms, computational-based structural and sustainability analysis, and digital fabrication technologies. Students work in pairs to design, analyze, and fabricate a full-scale constructed piece. Amir Karimpour [1121b, Design Research IV: Research Studio 3 credits. (Required of and limited to second-year M.Arch. II students.) This course is the culmination of the post-professional curriculum and allows students the opportunity to build on individual and group work around contemporary issues by proposing a final design thesis project. Not offered in 2019–2020. Joel Sanders]

#### Advanced Design Studios (Fall)

Advanced studios are limited in enrollment. Selection for studios is determined by lottery.

1101a, Advanced Design Studio 9 credits. Francis Kéré, Davenport Visiting Professor

1102a, Advanced Design Studio 9 credits. Teddy Cruz and Fonna Forman, Bishop Visiting Professors

1103a, Advanced Design Studio 9 credits. David Gissen, Saarinen Visiting Professor

**1104a, Advanced Design Studio** 9 credits. Tod Williams and Billie Tsien, Gwathmey Professors in Practice

1105a, Advanced Design Studio 9 credits. Elia Zenghelis, Foster Visiting Professor

1106a, Advanced Design Studio 9 credits. Fernanda Canales, Kahn Visiting Assistant Professor

1107a, Advanced Design Studio 9 credits. John Spence, Bass Distinguished Visiting Architecture Fellow; Patrick Bellew and Henry Squire

1108a, Advanced Design Studio 9 credits. Alan J. Plattus

1109a, Advanced Design Studio 9 credits. Mark Foster Gage and Graham Harman

#### Advanced Design Studios (Spring)

Advanced studios are limited in enrollment. Selection for studios is determined by lottery.

1111b, Advanced Design Studio 9 credits. Anupama Kundoo, Davenport Visiting Professor

1112b, Advanced Design Studio 9 credits. Walter Hood, Bishop Visiting Professor

1113b, Advanced Design Studio 9 credits. Cazú Zegers, Saarinen Visiting Professor

1114b, Advanced Design Studio 9 credits. Stella Betts, Kahn Visiting Assistant Professor

1115b, Advanced Design Studio 9 credits. Pier Vittorio Aureli, Gwathmey Professor in Practice

1116b, Advanced Design Studio 9 credits. Tatiana Bilbao, Foster Visiting Professor

1117b, Advanced Design Studio 9 credits. Francine Houben and Isaäc Kalisvaart, Kahn Visiting Professors; Ruth Mackenzie, Kahn Visiting Assistant Professor

1118b, Advanced Design Studio 9 credits. Turner Brooks and Jonathan Toews

1119b, Advanced Design Studio 9 credits. Norma Barbacci, Stern Visiting Professor; Sunil Bald

## Elective Courses

1211a, Drawing and Architectural Form 3 credits. With the emergence of increasingly sophisticated digital technologies, the practice of architecture is undergoing the most comprehensive transformation in centuries. Drawing, historically the primary means of generation, presentation, and interrogation of design ideas, is currently ill-defined and under stress. This course examines the historical and theoretical development of descriptive geometry and perspective through the practice of rigorous constructed architectural drawings. The methods and concepts studied serve as a foundation for the development of drawings that consider the relationship between a drawing's production and its conceptual objectives. Weekly readings, discussions, and drawing exercises investigate the work of key figures in the development of orthographic and three-dimensional projection. Ultimately, the goal is to engage in a focused dialogue about the practice of drawing and different methods of spatial inquiry. Limited enrollment. Victor Agran

**1213b, Books and Architecture** 3 credits. For architects, the book has been a necessary (if not essential) tool for clarifying, extending, and promoting their ideas and projects. This seminar examines the phenomenon of the book in architecture as both an array of organizational techniques (what it is) and as a mediator (what it does). Arguably, outside of the artifice and material fact of the building itself, the book has been the preferred mode of discourse that architects have chosen to express their intellectual project. This seminar is part lecture, part workshop where the experience of making a series of books helps to inform the development of ideas about the projective capacity of the book. Through case studies, this seminar examines the relationship book production has with a selection of contemporary and historical practices, including each project's physical and conceptual composition as well as how each project acts as an agent of the architect within a larger world of communication. The second part of the seminar asks students to apply ideas in a series of three book projects that emphasize the book as an instrument of architectural thinking. Most projects are individual efforts, but work in pairs or groups is also explored. Limited enrollment. Luke Bulman

**1217a**, **Architectural Product Design** 3 credits. This course attempts to broaden the design experience by concentrating on the design and innovation of three-dimensional architectural objects not usually found in architectural building commissions. Students are required to design and fabricate full-size, working prototypes of four small objects, such as weather vanes, andirons, step stools, mailboxes, birdhouses, etc. Emphasis is on wood and metal, but all materials are considered. Issues of detail, scale, proportion, aesthetics, manufacturing, and commercial viability are explored. Limited enrollment. John D. Jacobson

**1223a**, **Formal Analysis I** 3 credits. The goal of this class is to learn to see and read as an architect through a weekly series of texts and comparative analyses that move from the theocentric late-medieval, to the humanism and anthropocentricity of the early Renaissance, to the beginning of the Enlightenment of the late eighteenth century. This survey is not intended historically but as an introduction to the seeing and reading of architecture through time. An architect must learn to see beyond the facts of perception and must see as an expert, different from the average user. This expertise implies being able to see,

as a form of close reading, that which is not present – the unseen. We look at architects who have animated discourse – from Brunelleschi to Piranesi – providing an example of disciplinary change over time. Limited enrollment. Peter Eisenman

[1224a, The Chair 3 credits. The chair has been a crucible for architectural ideas and their design throughout the trajectory of modern architecture. The chair is both a model for understanding architecture and a laboratory for the concise expression of idea, material, fabrication, and form. As individual as its authors, the chair provides a medium that is a controllable minimum structure, ripe for material and conceptual experiments. In this seminar, students develop their design and fabrication skills through exploration of the conceptual, aesthetic, and structural issues involved in the design and construction of a full-scale prototype chair. Limited enrollment. Not offered in 2019–2020. Timothy Newton, Nathan Burnell]

**1225b**, **Formal Analysis II** 3 credits. This course examines two questions: what was the modern and what was the postmodern? Through a series of weekly texts and comparative analyses, the nature of that difference, for instance universalizing or contradicting, is explored with the intention of reconsidering the modern in a contemporary context. The course is divided into two halves, one concerned with modernism from 1914 to 1939 and the second with postmodernism from 1968 to 1988. Considering architects from Le Corbusier to Robert Venturi, the class pursues the skill of close reading, which moves from the idealism of the modern to the criticality of the postmodern. 1223a, Formal Analysis I, is not a prerequisite. Limited enrollment. Peter Eisenman

[1226b, Site + Building 3 credits. This seminar investigates buildings and their sites. Conceived as a vehicle for understanding the relationship between site and building through critical analysis, the course examines ancient, historic, and contemporary works of architecture and landscape architecture. Material includes works by Hadrian, Diocletian, Michelangelo, Raphael, Palladio, Durand, Schinkel, Lutyens, Asplund, Aalto, Wright, Mies, Kahn, Neutra, Saarinen, Scarpa, Bawa, Krier, Eisenman, Ando, and Gehry. The seminar focuses on site organization strategies and philosophies of site manipulation in terms of topography; urban, suburban, and rural context; ecology; typology; spectacle; and other form-giving imperatives. Methods of site plan representation are also scrutinized. Requirements include three significant readings, one major class presentation, and the keeping of individual class notebooks. Limited enrollment. Not offered in 2019–2020. Steven Harris]

[1227b, Drawing Projects 3 credits. Each student admitted to the course comes prepared with a particular subject that is investigated through the media of drawing for the entire term. There is a weekly evening pin-up with group discussion of the work in progress. Limited enrollment. Not offered in 2019–2020. Turner Brooks]

**1228b, Disheveled Geometries: Ruins and Ruination** 3 credits. Architectural ruins index the total failure of individual buildings, technologies, economies, or, at times, entire civilizations. This course researches the topics of ruination and architectural ruins – what produces them, what defines them, and how they impact individuals, cities, and civilizations on levels from the visual and formal to the philosophical and psychological. The formal and visual materials of this course emerge from the study of ruins from

not only the past and present, but also the future, through research into the speculative territories of online "ruin porn," new genres of art practice, and in particular dystopian television and film projects that reveal an intense contemporary cultural interest in apocalyptic themes. While significant nineteenth-century theories of architectural ruination, including those of John Ruskin (anti-restoration) and Eugène Emmanuel Viollet-le-Duc (pro-restoration), are addressed, the primary intellectual position of the course emerges from readings and discussions of the philosophical methodology of "ruination." Student projects involve the philosophical and aesthetic ruination of iconic architectural projects to determine not only their essential qualities, but hidden, latent ones as well. Subsequent group discussion of this work vacillates between philosophical and aesthetic poles in an attempt to tease out new observations on these projects as well as on the nature of ruins and ruination. The self-designed final project is determined pending consultation between the students and instructor, but involves photorealistic failure of past, present, or future architectural or urban projects; dystopic visual speculations; fabrication experiments that test actual material decay and failure; or attempts to reproduce the aesthetic ambitions of ruin porn through the manipulation of existing, or the design of new, projects. The goal of the course is not to convey an existing body of architectural knowledge, but to unearth a new architectural discourse that considers architecture in reverse - emphasizing its decay rather than its creation in an effort to reveal new territories of architectural agency. Limited enrollment. Mark Foster Gage

**1233a, Composition and Form** 3 credits. This seminar addresses issues of architectural composition and form in four three-week exercises titled Form, Structure, Section, and Elevation. Leaving aside demands of program and site in order to concentrate on formal relationships and the impact of alternative strategies, these exercises are intended to develop techniques by which words, briefs, written descriptions, intentions, and requirements can be translated into three dimensions. Each subject is introduced by a one-hour lecture on organizational paradigms in works of architecture from many periods and a variety of cultures. The medium is both physical and 3-D digital models. Multiple iterations emerging from the first-week sketches and finalized in the following week are the basis for the generation of multiple, radically differing strategies, each to be analyzed and understood for its own unique possibilities and consequences. Limited enrollment. Peter de Bretteville

1239a, Theory through Objects: Activist Form 3 credits. This seminar seeks to address the increasing expectation that architecture more directly address the social and political problems of today: income inequality, racial division, religious persecution, gender identity and rights, and ecological crisis, to name a few. Students speculate on ways in which the design of buildings and objects can be more socially and politically impactful and if there are other ways to discuss these issues rather than relying on standard criticaltheory tropes that have governed architecture's social ambitions for decades. Instead of relying on dry PowerPoint presentations or abstract, intangible discussions, in this seminar all presentations, brainstorming, ideation, and think-tank-style discussions are done exclusively by engaging with physical objects. Students conduct preliminary research on historic examples of the politicization of objects, largely using the Victoria and Albert Museum's *Disobedient Objects* exhibition (2014–15) as a collective starting point, to position subsequent discussions related to selected writings by Jacques Rancière, Graham Harman, Elaine Scarry, Steven Shaviro, the Laboria Cuboniks Xenofeminist Collective, and others. Concepts and movements addressed include, but are not limited to, Dissensus/Aisthesis, Xenofeminism, Object-Oriented Ontology, Accelerationism, and Afrofuturism. All assignments involve the production of physical objects with the exception of students who opt to fulfill the History and Theory elective requirement through the writing of a fifteen-page paper instead of the production of a final object. Enrollment limited to ten. Mark Foster Gage

1240b, Custom Crafted Components 3 credits. This historically grounded, hands-on, project-based seminar requires individual aesthetic expression via the crafting of tangible, original, intimately scaled architectural elements. Exploration and experimentation with unusual combinations and sequences of analog and digital representation are encouraged by way of challenging preconception and expanding the spectrum of aesthetic expression. Selected iterations are developed into designs for specific building components and contexts. Relationships between creative liberty, craft, and manufacturing are explored via prototyping custom components using materials, means, and methods that are reasonable in contemporary professional practice. Limited enrollment. Kevin Rotheroe

**1241b, Rendered: Art, Architecture, and Contemporary Image Culture** 3 credits. This course addresses the role of digital production and image making in art and architecture at a time when consumers of culture, including architects, are inundated by digital images. Contemporary image culture has profound effects on how we understand authorship, materiality, and representation. The course examines the impact of the Internet on contemporary art and recent writing on aesthetic concepts, including post-digital, post-medium, and the new aesthetic. Students are asked to speculate on the current and future role of the image as an architectural medium in this context. The final project is a hybrid image-object situated in both a physical and an online context. Limited enrollment. Brennan Buck

[1242b, Architecture and Illusion 3 credits. This seminar examines the synthesis of architectural and representational space achieved during the Baroque period. In addition to the vanishing point and view point previously defined by perspective drawing, painter-architects, such as Andrea Pozzo, introduced a third point into their constructions, a station point occupied by the viewer, which for the first time synthesized building and drawing. Despite its popularity, architectural trompe l'oeil has been discounted since Pozzo's own time as a visual trick that collapses when viewed from multiple points. Technologically, its effects pale in comparison to the illusive power of contemporary media, but this seminar posits that trompe l'oeil has renewed relevance today amid revived interest in representation and its potential to create multiplicitous and ambiguous legibility. After establishing a conceptual foundation addressing both Western and non-Western modes of drawing, students develop a trompe l'oeil case study, speculating on the multiple implied volumes their precedent suggests and testing the threshold between representational and physical space. Limited enrollment. Not offered in 2019–2020. Brennan Buck]

[1243b, Graphic Inquiry 3 credits. This seminar explores how architects might use a wider array of communication processes – from text to image, from moving image to network and beyond – to describe, develop, and release their ideas strategically. The inquiry includes, but goes beyond, graphic tools to explore alternate models of knowledge creation; it is akin to research but is more open-ended in terms of its methodologies and possible outcomes. Architecture in this sense is seen in the context of a wide variety of other subjects. This seminar is structured in three parts, each one looking at a different communication medium and its effects: moving image, printed pamphlet, and a single surface/function web graphic. Each of these media implies different ideas of duration, attention, audience, and distribution and is explored through a series of activities: illustrated talks, readings, precedent studies, and three projects developed by each student. Limited enrollment. Not offered in 2019–2020. Luke Bulman]

**1289a, Space, Time, Form** 3 credits. This seminar explores key concepts, techniques, and media that have affected the design, discussion, and representation of architecture in the twentieth century. The seminar aims to develop a particular type of disciplinary knowledge by crossing experience and act with historical and theoretical engagement. The class foregrounds reciprocity of practice and context, believing the exchange provides an invaluable tool for understanding the origin of ideas and thereby capitalizing on their full potential. Each class is organized around a single concept (form, structure, space, time); technique (drawing, material, color); or media (typography, photography, weaving). Sessions require both a visual/material exercise and close reading of seminal texts. Particular attention is paid to working with different tools and techniques, registering, observing, and analyzing formal and material techniques and effects. Limited enrollment. Katherine (Trattie) Davies, Eeva-Liisa Pelkonen

1291c, Rome: Continuity and Change 3 credits. (Open only to M.Arch. I second-year and M.Arch. II first-year students. Enrollment subject to the permission of the instructors and satisfactory completion of all required preparatory course work.) This intensive five-week summer workshop takes place in Rome and is designed to provide a broad overview of that city's major architectural sites, topography, and systems of urban organization. Examples from antiquity to the present day are studied as part of the context of an ever-changing city with its sequence of layered accretions. The seminar examines historical continuity and change as well as the ways in which and the reasons why some elements and approaches were maintained over time and others abandoned. Hand drawing is used as a primary tool of discovery during explorations of buildings, landscapes, and gardens, both within and outside the city. Students devote the final week to an intensive independent analysis of a building or place. M.Arch. I students are eligible to enroll in this course after completing at least three terms. This course does not fulfill either the History and Theory or the Urbanism and Landscape elective requirements. Limited enrollment. Bimal Mendis, coordinator; Miroslava Brooks, Bryan Fuermann, Joyce Hsiang, George Knight

**1299a or b, Independent Course Work** 3 or 6 credits. Program to be determined with a faculty adviser of the student's choice and submitted, with the endorsement of the study area coordinator, to the Rules Committee for confirmation of the student's eligibility under the rules. (See the School's *Academic Rules and Regulations*.)

#### ELECTIVES OUTSIDE OF SCHOOL OF ARCHITECTURE

Courses offered elsewhere in the University may be taken for credit with permission of the instructor. Unless otherwise indicated, at the School of Architecture full-term courses are typically assigned 3 credits; half-term courses are assigned 1.5 credits. Students must have the permission of the Design and Visualization Study Area coordinators in order for a course to count as a visualization elective.

#### TECHNOLOGY AND PRACTICE

Martin Finio and Kyoung Sun Moon, Study Area Coordinators

This study area explores fundamental theories and methods of building technologies and the relationships among these technologies, architectural design, and the larger natural environment. Courses examine materials, construction, structural systems, and the environmental technologies that provide healthy, productive, sustainable, and comfortable environments. This area also covers professional practice and examines the relationship between methods of construction, procurement, and management. Advanced courses investigate specific technical systems in greater detail, survey emerging methods and technologies, and explore the relationship between building technologies and architectural design in current practice and writings.

For the M.Arch. I program, requirements in this study area include six courses that survey common technical systems used in buildings and integrate the consideration of these technical systems into architectural design through a series of projects of increasing complexity. In addition, there is a required course on architectural practice.

#### **Required** Courses

**2011a**, **Structures I** 3 credits. (Required of first-year M.Arch. I students.) An introduction to the analysis and design of building structural systems and the evolution and impact of these systems on architectural form. Lectures and homework assignments cover structural classifications, fundamental principles of mechanics, computational methods, and the behavior and case studies of truss, cable, arch, and simple framework systems. Discussion sections explore the applications of structural theory to the design of wood and steel systems for gravity loads through laboratory and computational exercises and design projects. Homework, design projects, and midterm and final examinations are required. Kyoung Sun Moon

**2012b**, **Structures II** 3 credits. (Required of first-year M.Arch. I students.) This course is a continuation of introductory analysis and design of building structural systems. The course introduces materials and design methods of timber, steel, and reinforced concrete. Structural behavior, ductility concepts, movement, and failure modes are emphasized. Geometric properties of structural shapes, resistances to stresses, serviceability, column analysis, stability, seismic, wind load, and lateral force resisting systems are presented. Homework involves calculations, descriptive analysis, and the building and testing of structural models. Midterm and final examinations are required. Prerequisite: 2011a. Kyoung Sun Moon

2016b, Building Project I: Research, Analysis, Design 3 credits. (Required of first-year M.Arch. I students.) This course explores the conception and construction of dwelling space in the city. Through a term-long process of collaborative research, analysis, design, and technical documentation, student teams examine the specific relationship of the human body to its environment, the elemental concerns of inhabitation, and the physical, spatial, and technical formation of building. A series of iterative analytical exercises, conducted at a range of scales using various analytical tools and design media, address the building site, its enclosure, apertures, interior surfaces, and its fixtures and fittings, and their roles in mediating our experience of private and social space, of weather, and of climate. This collaborative process begins at the start of the term with the formation of design teams and the introduction of our Building Project partners: our clients at Columbus House of New Haven, a New Haven-based shelter and permanent supportive housing provider for the homeless, and the New Haven city officials who administer the city's zoning, building, and life-safety laws and regulations under the auspices of New Haven's Livable City Initiative. Over the course of the term and in conjunction with a series of lectures, field trips, and workshops, each student team develops and documents a distinct and technically detailed design proposal for a two-family house, one of which is selected at the end of the term. This work sets the stage for the second phase of the course and the subsequent work of the summer: the construction of the Jim Vlock Building Project house in New Haven's Hill neighborhood. Faculty

**2017c, Building Project II: Construction** 3 credits. (Required of first-year M.Arch. I students, early summer.) This course examines the materialization of a building, whereby students are required to physically participate in the construction of a structure that they have designed. By engaging in the act of making, students are exposed to the material, procedural, and technical demands that shape architecture. Construction documents are generated and subsequently put to the test in the field. Students engage in collaboration with each other, and with a client, as they reconcile budgetary, scheduling, and labor constraints, and negotiate myriad regulatory, political, and community agencies. The course seeks to demonstrate the multiplicity of forces that come to influence the execution of an architectural intention, all the while fostering an architecture of social responsibility, providing structures for an underserved and marginalized segment of the community. For 2019 students enrolled in this course will be required to work on the project from April 29 through June 28. For more information, see the section on the Building Project online at http://architecture.yale.edu/academics/building-project. Prerequisites: 1011a, 1012b. Adam Hopfner, director; Faculty

2018a, Advanced Building Envelopes 3 credits. (Required of students who waive 2021a.) Anna Dyson, Mohamed Aly Etman

**2021a**, Environmental Design 3 credits. (Required of second-year M.Arch. I students.) This course examines the fundamental scientific principles governing the thermal, luminous, and acoustic environments of buildings, and introduces students to the methods and technologies for creating and controlling the interior environment. Beginning with an overview of the Laws of Thermodynamics and the principles of Heat Transfer, the course investigates the application of these principles in the determination of building behavior, and explores the design variables, including climate, for mitigating that

behavior. The basic characteristics of HVAC systems are discussed, as are alternative systems such as natural ventilation. The second half of the term draws on the basic laws of physics for optics and sound and examines the application of these laws in creating the visual and auditory environments of a building. Material properties are explored in detail, and students are exposed to the various technologies for producing and controlling light, from daylighting to fiber optics. The overarching premise of the course is that the understanding and application of the physical principles by the architect must respond to and address the larger issues surrounding energy and the environment at multiple scales and in domains beyond a single building. The course is presented in a lecture format. Homework, computational labs, design projects, short quizzes, and a final exam are required. Anna Dyson, Naomi Keena

**2022b**, Systems Integration and Development in Design 3 credits. (Required of secondyear M.Arch. I students.) This course is an integrated workshop and lecture series in which students learn to develop the technical systems of preliminary design proposals from earlier studio work. The careful advancement of structural form and detail, environmental systems, egress and accessibility, and envelope design, as well as an understanding of the constructive processes from which a building emerges, are all approached systematically, as elements of design used not only to achieve technical and performance goals but also to reinforce and reinform the conceptual origins of the work. The workshop is complemented by a series of lectures from leading structural, environmental, and envelope consultants. Detailed technical drawings and analyses, along with the sustained use of BIM software, are required. Prerequisites: 1021a, 2011a, 2012b, 2021a. Martin Finio, coordinator; Anibal Bellomio, Kristen Butts, Alastair Elliott, Erleen Hatfield, Robert Haughney, Kristin Hawkins, John D. Jacobson, Laurence Jones, Jennifer Lan, Aaron Martin, Gina Narracci, Kari Nystrom, Laura Pirie, Victoria Ponce de Leon, Craig Razza, Pierce Reynoldson, Edward M. Stanley, Celia Toché, Adam Trojanowski, and faculty

**2031a**, Architectural Practice and Management 3 credits. (Required of third-year M.Arch. I students. No waivers allowed. Available as an elective for M.Arch.II students who obtain permission of the instructor.) The process by which an architectural design becomes a building requires the architect to control many variables beyond the purely aesthetic, and understanding how to control that process is key to successful practice. This course provides an understanding of the fundamentals of the structure and organization of the profession and the mechanisms and systems within which it works as well as the organization, management, and execution of architectural projects. Lectures explore the role and function of the architect, the legal environment, models of practice and office operations, fees and compensation, project delivery models and technology, and project management in the context of the evolution of architectural practice in the delivery of buildings. Phillip G. Bernstein, John Apicella

#### Elective Courses

**2211b, Technology and Design of Tall Buildings** 3 credits. This seminar investigates the dynamic interrelationship between technology and architecture in tall buildings. Among the various technologies involved, emphasis is placed on structural and facade systems, recognizing the significance of these systems, the separation of which in terms of their

function led to modern architecture, and allowed the emergence of tall buildings. This seminar reviews contemporary design practice of tall buildings through a series of lectures and case study analyses. While most representative technologies for tall buildings are studied, particular emphasis is placed on more recent trends such as diagrid structures and double-skin facades. Further, this seminar investigates emerging technologies for tall buildings and explores their architectural potentials. Finally, this course culminates in a tall building design project and presentation. Limited enrollment. Kyoung Sun Moon

[2219b, Craft, Materials, and Digital Artistry 3 credits. This course reviews materials and manufacturing processes especially suited for digitally crafting aesthetically unique architectural components and surfaces. Cross-fertilization of digital and conventional modes of representation and making is emphasized, as this approach often enables economically viable, highly original artistic creative expression. This is a hands-on, projectbased seminar addressing fundamental theoretical issues in the transformation of ideas into material reality via representations, hand-operated tools, and CNC-automated forming devices. Limited enrollment. Not offered in 2019–2020. Kevin Rotheroe]

2222a, The Mechanical Eye 3 credits. This class examines the human relationship to mechanized perception in art and architecture. Mechanical eyes, such as satellites, rovers, computer vision, and autonomous sensing devices, give us unprecedented access to nonhuman and superhuman views into known and unknown environments. But the technology of automatic observation alienates human observers and fools them into thinking that this is an unemotional, inhuman point of view due to its existence in a numeric or digital domain. The observer is looking at seemingly trustworthy data that has been "flattened" or distilled from the real world. But this face-value acceptance should be rejected; interpreters of this device data should interrogate the motives, biases, or perspectives informing the "artist" in this case (that is, the developer/programmer/engineer who created the devices). Despite the displacement of direct human observation, mechanical eyes present in remote sensing, LiDAR scanning, trail-cams, metagenomic sequencing, urban informatics, and hyperspectral imaging have become fundamental to spatial analysis. But as these become standard practice, observers should also be trained in cracking open the data to understand the human perspective that originally informed it. In this class, students investigate the impact of the mechanical eye on cultural and aesthetic inquiry into a specific site. They conceptually consider their role as interpreter for the machine and create a series of site analysis experiments across a range of mediums. The experiments are based on themes of inversion, mirroring, portraiture, memory, calibration, and foregrounding to "unflatten" data into structure and form. Limited enrollment. Dana Karwas

**2223b, Structuring Architecture: Form and Space** 3 credits. Through case and design studies, this seminar investigates the performance of structures as what fundamentally defines the form and space of architecture. Limited enrollment. Kyoung Sun Moon

**2226b, Design Computation** 3 credits. The capabilities and limitations of architects' tools influence directly the spaces architects design. Computational machines, tools once considered only more efficient versions of paper-based media, have a demonstrated potential beyond mere imitation. This potential is revealed through design computation, the creative application of the processes and reasoning underlying all digital technology, from

e-mail to artificial intelligence. Just as geometry is fundamental to drawing, computation affords a fundamental understanding of how data works, which is essential to advance the development of BIM, performative design, and other emerging methodologies. This seminar introduces design computation as a means to enable architects to operate exempt from limitations of generalized commercial software; to devise problem-specific tools, techniques, and workflows; to control the growing complexities of contemporary architectural design; and to explore forms generated only by computation itself. Topics include data manipulation and translation, algorithms, information visualization, computational geometry, human-computer interaction, custom tooling, generative form-finding, emergent behavior, simulation, and system modeling. Using Processing, students develop computational toolsets and models through short, directed assignments ultimately comprising a unified, term-long project. Limited enrollment. Michael Szivos

**2230b, Exploring New Value in Design Practice** 3 credits. How do we make design a more profitable practice? Design business has traditionally positioned building as a commodity in the delivery supply chain, valued by clients like other products and services purchased at lowest first cost. Despite the fact that the building sector in its entirety operates in large capital pools where significant value is created, intense market competition, sole focus on differentiation by design quality, and lack of innovation in project delivery and business models have resulted in a profession that is grossly underpaid and marginally profitable. The profession must explore new techniques for correlating the real value of an architect's services to clients and thereby break the downward pressure on design compensation. This seminar redesigns the value proposition of architecture practice, explores strategies used by better-compensated adjacent professions and markets, and investigates methods by which architects can deliver – and be paid for – the value they bring to the building industry. Prerequisite: 2031a or equivalent strongly recommended. Limited enrollment. Phillip G. Bernstein, Brittany Olivari

**2234b**, Material Case Studies 3 credits. This seminar focuses on the intuition for material use in both the execution and generation of design. Students are exposed to a broad overview of the role of materials in the formation and execution of a spatial concept, as well as provided a venue for intensive work with specific materials. Structured along lines of research, experimentation, and design, the course is an intensive investigation into the relationship between a material's substance and its performance metrics and qualities. In addition to looking at materials typically used in the production of built space, the course explores whether the investigation of materials not traditionally used in architecture can further the profession. Research and discussions, in parallel, look at how material decisions affect the environment and human health. Physical material samples are used throughout the term. A site-specific, design-build spatial proposal serves as the course's final project. Limited enrollment. Emily Abruzzo

**2236b**, **Design/Data/Biology** 3 credits. This seminar explores the frontiers that are opening up across multiple design disciplines as a result of the ongoing revolution in biotechnology, bioinformatics, and related fields. In the first half of the course, the seminar studies the relationships that have been historically established with living systems throughout the development of architectural technology and culture. Examined are some of the critical ways in which architecture, agriculture, and urbanism have shaped

our own genetics as well as those of other plant and animal species since the origins of social organization. It is within this context that the course challenges several entrenched conventions within architectural and environmental control systems design that have sought to separate built environments from the complex interdependency of surrounding ecosystems. In the second half of the course, using each student's current or prior studio work as a use case, students extend an aspect of the design intentions of the project into a particular experimental area of interest, one that is aligned with emerging biotechnical methods, in terms of how the architecture might process either energy, water, waste, materials, or living systems in a radically different way from conventional expectations. Limited enrollment. Anna Dyson

**2237a, Computation Composite** 3 credits. This course investigates nonlinear computational generative systems and their application in the manufacturing of architectural design research. Functioning as an open source research group of computational design, by concentrating primarily on Python for Rhinoceros<sub>3</sub>D, a new set of possibilities for the development of cutting-edge digital techniques is explored. The seminar tests this software in an intensive format and seeks to produce innovative intersections between explicit modeling/figuration and algorithmic formation. No previous programming experience is necessary; both introductory- and advanced-level students are accommodated with a series of introductory sessions, online tutorials, workshops, and lectures followed by suggested readings that gradually focus on individual projects. Students also work in pairs to design, code, and fabricate a full-scale constructed assembly. Limited enrollment. Ezio Blasetti

**2241b, Building Disasters** 3 credits. This seminar explores accidents, failures, and catastrophes, large and small, in buildings and – whether caused by bad luck, bad design, bad management, or miscalculation – how such incidents have impacted users, owners, and designers. Limited enrollment. John D. Jacobson

**2299a or b, Independent Course Work** 3 or 6 credits. Program to be determined with a faculty adviser of the student's choice and submitted, with the endorsement of the study area coordinators, to the Rules Committee for confirmation of the student's eligibility under the rules. (See the School's *Academic Rules and Regulations.*)

#### ELECTIVES OUTSIDE OF SCHOOL OF ARCHITECTURE

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## HISTORY AND THEORY

Keller Easterling and Eeva-Liisa Pelkonen, Study Area Coordinators

This study area explores the relationship between design, history, and theory through a broad range of courses in which the analysis of buildings, cities, landscapes, and texts supports the articulation and criticism of fundamental concepts, methods, and issues. Historical and contemporary projects and writings are studied in context and as part of the theoretical discourse of architecture. For entering M.Arch. I students who have not had significant prior architectural training, the pre-first-year visualization course (1000c) includes a broad survey of Western architectural history to the nineteenth century. For all M.Arch. I students, there is a firstyear required survey course of nineteenth- and twentieth-century architectural history (3011a) followed in the second term by a required course on architectural theory (3012b).

In addition, M.Arch. I students must satisfactorily complete two elective courses from this study area that require at least a fifteen-page research paper. With the exception of courses in which a student elects to do a project in lieu of a research paper, or courses whose descriptions specifically indicate that they do not fulfill the History and Theory elective requirement, all elective courses in this study area fulfill this requirement. Provided a fifteen-page research paper is required, the elective courses 4222a and 4223b also fulfill this History and Theory elective requirement, although those listed from the Urbanism and Landscape study area cannot be used to satisfy both the History and Theory and the Urbanism and Landscape elective requirements. Courses in other study areas as well as courses offered at the University outside of the School of Architecture that include a research paper and cover an architectural history and theory topic may fulfill the History and Theory elective requirement provided a student requests and receives permission from one of the History and Theory study area coordinators qualifying that course to fulfill the requirement. One of the two required History and Theory electives should be in a non-Western subject.

For the M.Arch. II program, a second-year required course dealing with issues of architecture and urbanism (3071a) is required of students who matriculated in 2018. For students matriculating in 2019 and later, a sequence of three post-professional design research seminars is required (3072a, 3073b, 3074a). These focus on design as research and build to an individual project within a larger themed studio (1121b) and symposium in the final term of the program.

#### **Required** Courses

**3011a**, **Modern Architecture and Society** 3 credits. (Required of first-year M.Arch. I students; available as an elective for M.Arch. II and M.E.D. students.) The course embraces the last century and a half's history of architecture, when traditional fables began to yield to more scientifically conceived ideas of architecture's role in the creation of civilizations. As architecture gained importance in advancing social and industrial agendas, it also built a basis for theoretical reflection and visionary aesthetics. The expanding print and media culture accelerated the migration of ideas and propelled architecture beyond its traditional confines. Discussion of major centers of urban culture and their characteristic buildings alternates with attention to individual concepts and their impact in an increasingly interconnected culture of design. Anthony Vidler

**3012b, Architectural Theory** 3 credits. (Required of first-year M.Arch. I and M.E.D. students; available as an elective for M.Arch. II students.) This course explores the history of Western architectural theory, from 1750 to the present, through the close reading of primary texts. Lectures place the readings in the context of architectural history; the texts are discussed in required discussion sections. Topics include theories of origin, type and character, the picturesque, questions of style and ornament, standardization

and functionalism, critiques of modernism, as well as more contemporary debates on historicism, technology, and environmentalism. Marta Caldeira

**3071a, Issues in Architecture and Urbanism: Practice** 3 credits. (Required of and limited to second-year M.Arch. II students.) By investigating a broad range of projects and practitioners that have impacted the discipline of architecture, this course is designed as a forum for post-professional students to discuss and explore their unique interests and backgrounds as a means to contemplate and define the beginnings of their own practice. Aniket Shahane

**3072a, Design Research I: Cross-Disciplinary Perspectives** 3 credits. (Required of and limited to first-year M.Arch. II students.) This introductory class familiarizes student with a new skill set: how to conduct applied design research seen through the lens of each of the research perspectives taught in the program. In the process, students gain a general background in some of the key humanitarian challenges where designers can make a difference in the next century. Joel Sanders

**3073b, Design Research II: Challenging the Built Environment** 3 credits. (Required of and limited to first-year M.Arch. II students.) This seminar requires students to explore an assigned theme based on urgent contemporary issues in architecture and urbanism, both through individual projects and as a group. Students also select thesis projects adjacent to the course theme to take into the subsequent post-professional seminar and post-professional design studio. Joel Sanders

[**3074a**, **Design Research III: Methods Workshop** 3 credits. (Required of and limited to second-year M.Arch. II students.) Not offered in 2019–2020. Joel Sanders]

**3091a, Methods and Research Workshop** 3 credits. (Required of first-year M.E.D. students; available as an elective for M.Arch. I and M.Arch. II students with permission of instructor.) This course introduces students to methods of architectural writing and research, laying the groundwork for an advanced research project. By investigating various text genres, such as surveys, journalism, manifestos, scholarly essays, critical essays, and narratives, this course studies ways of writing about architecture, urbanism, and the environment. Recent debates concerning the relationship between architectural history and theory and the questions about disciplinary and interdisciplinary boundaries are explored. Working toward a substantial research paper requirement, students are introduced to hands-on research through a series of library and archival workshops. Limited enrollment. Mary McLeod

**3092a or b, Independent M.E.D. Research** 3–6 credits first year, fall term; variable credits remaining terms, determined in consultation with the director of M.E.D. Studies. (Required of and limited to M.E.D. students in each term.) The proposal submitted with the admissions application is the basis for each student's study plan, which is developed in consultation with faculty advisers. Independent research is undertaken for credit each term, under the direction of a principal adviser, for preparation and completion of a written thesis. The thesis, which details and summarizes the independent research, is to be completed for approval by the M.E.D. committee by the end of the fourth term. Keller Easterling

#### Elective Courses

**3216b, Case Studies in Architectural Criticism** 3 credits. This seminar concentrates on issues that influence the way modern buildings and their architects are perceived by critics, scholars, and the public. The careers of such architects as Frank Lloyd Wright, Eero Saarinen, Louis Kahn, Philip Johnson, Robert Venturi, and Frank Gehry provide a framework for the examination of how patronage, fashion, social change, theory, finance, and politics affect the place of prominent designers and their work in the historical record. Readings include such critics as Lewis Mumford, Ada Louise Huxtable, Blair Kamin, Christopher Hawthorne, Michael Kimmelman, and Martin Filler. Responding to lectures by the instructor and visitors, students develop criteria for judging architectural quality (program, site, "message," details), and then apply those criteria in three brief analytical papers that build toward a fifteen-page research paper investigating the elements that contributed to the "success," "failure," or "reevaluation" of an individual building, an architect's career, or a body of architectural work. All written assignments are reviewed in individual conferences with the instructor. Limited enrollment. Carter Wiseman

**3223a, Parallel Moderns: Crosscurrents in European and American Architecture, 1880– 1940** 3 credits. This seminar puts forward the argument that what many have accepted as the mutually exclusive discourses of tradition and innovation in the modern architecture of the first half of the twentieth century – respectively identified as the "New Tradition" and the "New Pioneers" by Henry-Russell Hitchcock in two articles in *Architectural Record* in 1928, and more elaborately in his *Modern Architecture: Romanticism and Reintegration* (1929) – in fact share common genealogy and are integral to an understanding of modern architecture as a whole. Lectures by the instructor develop this argument with reference to a diverse group of architects – some well-known and others less familiar. Limited enrollment. Robert A.M. Stern

**3228a, The Autobiographical House** 3 credits. Architects and artists have long built dwellings for themselves (and for surrogate clients) as showcases of their art, as sites of collecting and teaching, and as retreats from professional life. From Thomas Jefferson to Philip Johnson, from John Soane to Eileen Gray and Frank Gehry, building a house of one's own often harks back to Renaissance models while experimenting with new manifestations of the architect's evolving role. This seminar examines key examples of buildings as well as wide-ranging readings in autobiography. Limited enrollment. Kurt W. Forster

**3229b, Sustainability: A Critical View from the Urban History of Amazonia** 3 credits. The urban frontier in Amazonia is among the fastest growing in the world: 80 percent of it is "informal." Under export-oriented, neo-extractivist policies, this trend is unlikely to revert. Nevertheless, scarce research has focused on the urban phenomenon in Amazonia. How can burgeoning forest cities be retrofitted/designed? Could urbanization be allied with forest resurgence in the region? Can environmental history and archaeology influence the way in which we approach Amazonian settlements? What can we learn from local communities? Could their ancestral knowledge be adapted to current needs and illuminate design? In this seminar, we critically probe current approaches to sustainability, aware that "green solutions" being advanced by the global north often demand further

extraction of natural resources in the global south. We analyze the complex intertwining between global capitalism and Amazonia, as well as the critical role both are called to play in lieu of climate change. Limited enrollment. Ana María Durán Calisto

**3232a, Politics of Space** 3 credits. This seminar explores the relation between space, power, and politics in the urban environment from the Enlightenment period to the present. In contrast to some Marxist approaches that see architecture primarily as an ideological reflection of dominant economic forces, this seminar investigates how power is actually produced and embodied in the physical environment. In other words, space and architecture are seen as active participants in the structuring of our daily lives and relations, not merely as passive reflections of political and economic institutions. Two theorists are critical to this exploration: the philosopher and sociologist Henri Lefebvre and the philosopher/historian Michel Foucault. The writings of more recent theorists (such as Marshall Berman, Michel de Certeau, Teresa Caldeira, Mike Davis, Guy Debord, Andreas Huyssen, Rem Koolhaas, Elizabeth Wilson, and Douglas Spencer) are also examined with regard to issues concerning the politics of space. Limited enrollment. Mary McLeod

3234a and 3256b, Renaissance and Modern I and II 3 credits (each term). This course seeks to confront historical knowledge with speculation about the intentions of architectural designs and the nature of their realization. Drawing as much on the modern interest in cognitive processes as on selective reconstruction of historic moments, the course expects students to contribute to the debate between Peter Eisenman and Kurt Forster, read a limited series of texts, and focus their attention on the buildings that command center stage. The challenge resides in the effort to understand the beginnings of new ideas during the Renaissance, to grow aware of their evolution and consequences, without distorting their historical nature. The course continues in the spring term by taking a broad look at the twentieth century and then organizes itself around a few key phases in the formation of architectural consciousness, moving through the postwar debates to current dilemmas. The two terms are closely choreographed, but the courses can be taken separately. Students are expected to prepare for each session by studying the posted readings, the principal buildings and images that will be discussed, and preparing questions to be raised during the session. Students each submit a succinct account of their thinking on a building that is key to an understanding of Renaissance architecture. Limited enrollment. Peter Eisenman, Kurt W. Forster

**3239b, Launch: Architecture and Entrepreneurialism** 3 credits. This seminar considers the position of design within contemporary innovation. Architects are renovating approaches to practice and positioning spatial variables to have more authority in global decision-making. Diverging from the usual tropes of start-up culture, spatial innovations are not products, but relationships with ramifying consequences. The seminar considers both historical and contemporary moments when design has deployed unconventional forms of practice. Teams of students, which may include members from all around the University, launch a proposal, workshop that proposal throughout the term, and present it to an audience. A final paper/presentation completes work for the course. Limited enrollment. Keller Easterling

**3240a**, **Spatial Concepts of Japan: Their Origins and Development in Architecture and Urbanism** 3 credits. The seminar explores the origins and developments of Japanese spatial concepts and surveys how they help form the contemporary architecture, ways of life, and cities of the country. Many Japanese spatial concepts, such as *ma*, are about creating time-space distances and relationship between objects, people, space, and experiences. These concepts go beyond the fabric of a built structure and encompass architecture, landscape, and city. Each class is designed around one or two Japanese words that signify particular design concepts. Each week, a lecture on the word(s) with its design features, backgrounds, historical examples, and contemporary application is followed by student discussion. Contemporary works studied include those by Maki, Isozaki, Ando, Ito, SANAA, and Fujimoto. The urbanism and landscape of Tokyo and Kyoto are discussed. Students are required to make in-class presentations and write a final paper. Limited enrollment. Yoko Kawai

[**3266b**, **Greats: China's Big Projects**, **1949–1976** 3 credits. This seminar focuses on the large-scale experiments in new Chinese "building" during the tenure of Mao Zedong. Over this time span many fundamental notions of daily life – language, expression, family, education, countryside, and city – were redefined and radically tested. These new representations of culture included a paradox for architecture: how to both reflect progress while remaining place-specific. The first four weeks of the seminar ground students in the targeted sites with introduction to Yale's research collections. Over the balance of the term, primary resources from these collections and assigned readings are used to explore the particular "experiments" in modern China building and the qualities of "new" and other discourses that the campaigns of Mao's China represented. Limited enrollment. Not offered 2019–2020. Amy Lelyveld]

3272b, Exhibitionism: Politics of Display 3 credits. Since their inception in the eighteenth century, art museums - prestigious buildings commissioned by those who wield power and influence – have behaved like cultural barometers registering changing attitudes about the role cultural institutions play in society. Looking at museum buildings from the inside out, this seminar traces the evolution of this building type through an in-depth analysis of its key architectural elements: gallery, interstitial (circulation, assembly, retail) and infrastructure (security/climate control) spaces, and site. This seminar explores how the spatial and material development of these tectonic components both mirrors and perpetuates changing cultural attitudes about aesthetics, class, power, wealth, nature, leisure, gender, body, and the senses as seen through the eyes of artists, architects, critics, collectors, and politicians. Topics include gallery spectatorship from the Renaissance picture frame to the modernist white cube; shifting sites from palace to park to repurposed industrial structures; urban renewal, gentrification, and the postwar museum; starchitecture and the trophy museum; cruising: museums as social condensers to see and be seen; multimedia artistic practices and information technologies; and new typologies, such as biennials, art fairs, private collections, and retail hybrids. Limited enrollment. Joel Sanders

**3280a Medium Design** 3 credits. While usually focused on designing buildings, designers might also design the medium in which those buildings are suspended. Beyond associations with communication technologies, medium, in this context, means middle or

milieu. Considering ground instead of figure, or field instead of object, medium design inverts some dominant cultural logics and offers additional aesthetic and political capacities for addressing intractable problems. Medium is assessed for latent properties that unfold over time and territory, propensities within a context, potentials in relative position, or the agency in arrangement, and like an operating system or a growth medium, it decides what will live or die. In this matrix of activity where it is easier to detect discrepancy, latency, temperament, and indeterminacy, right answers are less important than unfolding or branching sequences of response. Benefiting from an artistic curiosity about reagents and spatial mixtures or spatial wiring, medium design suggests different organs of design or different ways to register the design imagination. Beyond buildings, master plans, declarations, laws, or standards, it deploys multipliers, switches, or time-released organs of interplay like bargains and chain reactions. While not dominant, this habit of mind is ever-present in many disciplines and leads to readings that include Michel Foucault, Giorgio Agamben, Gilbert Ryle, Gilles Deleuze, Bruno Latour, J.J. Gibson, Marshall McLuhan, Harold Innis, Jacques Rancière, Walter Benjamin, Gregory Bateson, Vilem Flusser, Dunne and Raby, and John Durham Peters. An in-class presentation and final paper complete the requirements of the course. Limited enrollment. Keller Easterling

3283b, After the Modern Movement: An Atlas of the Postmodern, 1945-1989 3 credits. This course aims to answer the questions: What was and what is postmodernism in architecture? Postmodernism should not be seen as a style, but rather as a condition that arose out of the ahistorical, acontextual, self-referential, materialistic modernism that prevailed in the post-WWII era. By pushing aside history, context, and social concerns, modernism of that period exhausted itself of its potential, and restive architects incorporated figuration and representation as they sought to make the discipline more responsive to the wide expanse of popular culture. However, postmodernism was not intended as a repudiation of modernism, but as an evolution and corrective action. The course is primarily concerned with architecture (as chronicled by Charles Jencks in his 1977 book, The Language of Post-Modern Architecture) and key texts by architects, such as Robert Venturi, Aldo Rossi, and James Stirling. Students explore a number of architects who have been overlooked and deserve renewed consideration. This seminar is motivated by conditions in contemporary practice, including the renewed interest in the postmodernism of the previous generation and in the return of precedent to the design process. Limited enrollment. Robert A.M. Stern

**3284a, Architectural Writing** 3 credits. (M.Arch. I students must receive permission of instructor to enroll.) The goal of this course is twofold: to introduce students to how writers have addressed and described places – buildings, terrain, built environments – and their relationships to such spaces; and through a series of assignments, using these readings as exemplary, to help students learn to write clearly about place themselves. Writing assignments include memory pieces, imaginative pieces, and descriptions of structures and landscapes in New Haven. The seminar treats the page itself as a place in which ideas about place, including current projects and proposals, can be articulated and made legible to readers both inside and outside the architectural community. Students write six essays: the first five are short (1,200 words), on a specific prompt; the last is a longer essay (2,500 words) describing and detailing a current student project. Each student shares work with the class on a weekly basis. Enrollment limited. Cynthia Zarin

3293b, The Polychromatic Reconstruction of Architecture 3 credits. This seminar explores the history and practice of "polychromatic reconstruction" in architecture. Polychromatic reconstruction typically describes the manner in which architects, historians, and archaeologists reconstruct the lost, colorfully painted surfaces of ancient classical sculptures and buildings. The seminar examines this practice through a much wider range of historical case studies and through a far broader concept of color recovery. The course explores polychromatic reconstruction globally and historically, in world-wide ancient and modern architectural artifacts and spaces; materially, by understanding the histories of colorants and their production; environmentally, by understanding the role of light and air pollution in color transformation; theoretically, by exploring pre- and post-Newtonian theories of color perception; and politically, by understanding how the practice often becomes entangled with contemporary debates about subjectivity and disciplinarity. Students read key historical and theoretical documents, examine archival evidence, hear from experts, and develop individual polychrome reconstruction projects. Ultimately, the course offers both a historical and theoretical analysis of a particular subject - the history of color reconstruction in architecture - and a model for combining the pedagogy of an architecture history and theory seminar with technical components found in lab-format courses. Limited enrollment. David Gissen

**3299a or b, Independent Course Work** 3 or 6 credits. Program to be determined with a faculty adviser of the student's choice and submitted, with the endorsement of the study area coordinator, to the Rules Committee for confirmation of the student's eligibility under the rules. (See the School's *Academic Rules and Regulations*.)

3300b/552b, The Idea of an Avant-Garde in Architecture: Reading Manfredo Tafuri's The Sphere and the Labyrinth 3 credits. No historian of architecture has written more critically about the contradictions of architecture in late-modern society or reflected more deeply on the tasks of architectural historiography than Manfredo Tafuri (1935-1994). The seminar undertakes a close reading of one of Tafuri's richest and most challenging books, The Sphere and the Labyrinth: Avant-Gardes and Architecture from Piranesi to the 1970s. Originally published in 1980 and translated in 1987, it appeared at the midpoint of the Italian historian's career and at a pivotal moment in relation to postmodernism. The first sustained effort to define and historicize the concept of the avant-garde specifically in relation to architecture, the book opens with a formidable methodological introduction, "The Historical 'Project." It goes on to offer an original analysis of Piranesi's architectural inventions and their subversive impact before traversing a wide range of architectural and urban developments in Europe and the United States during the early twentieth century. It concludes with two polemical chapters on the neo-avant-gardes of the 1960s and '70s. The class works through the text chapter by chapter, amplifying it with supplemental readings. Each student identifies a research topic leading to a final term paper. Concerned equally with history and historiography-both with material and ideological contexts and with the ways they are written into history - the seminar's central aim is to question the role and function of the avant-garde in architecture. Is the concept of avant-gardism still meaningful today? Or should it be relegated to the dustbin of twentieth-century ideas? Required of first-year Ph.D. students and open to others with permission of the instructor. Joan Ockman

3301b, New York as Incubator of Twentieth-Century Urbanism: Four Urban Thinkers and the City They Envisioned 3 credits. The seminar is constructed as a hypothetical debate among four urban thinkers whose influential contributions to the discourse of the modern city were shaped by their different responses to New York City's urban and architectural development: Lewis Mumford (1895–1990), Robert Moses (1888–1981), Jane Jacobs (1916–2006), and Rem Koolhaas (b. 1944). The seminar explores a range of issues that variously preoccupied them and put them at odds, from civic representation and ecology to infrastructure development and urban renewal policy, from community and complexity to the role played by architecture in the urban imaginary. The focus is twofold: on the contribution of the "urban intellectual" to the production of culture; and on New York's urban and architectural history. New York has been called the capital of the twentieth century. By counterposing and reassessing the ideas of these visionary thinkers, the seminar aims to reflect on the past, present, and future of New York and other twenty-first-century cities. Complementing readings by the four protagonists is a rich selection of historical and theoretical material. Each student is responsible for making two case-study presentations and writing a thematically related term paper. Limited enrollment. Joan Ockman

#### ELECTIVES OUTSIDE OF SCHOOL OF ARCHITECTURE

Courses offered elsewhere in the University may be taken for credit with permission of the instructor. Unless otherwise indicated, at the School of Architecture full-term courses are typically assigned 3 credits; half-term courses are assigned 1.5 credits. Students must have the permission of the History and Theory Study Area coordinators in order for a course to count as a history/theory elective.

#### URBANISM AND LANDSCAPE

Alan J. Plattus and Elihu Rubin, Study Area Coordinators

In this study area, a broad range of courses explore the aesthetic, economic, social, and political influences on the spatial form of urban places and the urban, suburban, and rural landscapes that form our design ecology.

For the M.Arch. I program, required courses in this study area include an introduction to urban design (4011a) and the satisfactory completion of one of the elective seminar courses from this study area. Courses offered outside the School not listed below may fulfill this elective requirement provided permission from the study area coordinators has been granted.

## **Required** Course

**4011a/345a, Introduction to Urban Design** 3 credits. (Required of first-year M.Arch. I students.) This course is an introduction to the history, analysis, and design of the urban landscape presented with weekly lectures and discussion sections. Emphasis is placed on understanding the principles, processes, and contemporary theories of urban design, and the relations between individual buildings, groups of buildings, and the larger physical and cultural contexts in which they are created and with which they interact. Case studies

are drawn from cities around the world and throughout history and focus on the role of public space and public art in shaping the form, use, and identity of cities and regions. Alan J. Plattus

#### Elective Courses

4213a, The City and Carbon Modernity 3 credits. Humanity has moved through three energy paradigms, each of which has produced different built environments and social organizations. At each transition-from nomadic to agricultural and from agricultural to industrial – the productive capacity of human society was transformed, restructuring the existing social order and engendering a corresponding spatial and architectural paradigm. This course studies our current energy paradigm - carbon-intensive fossil fuels as a driver of urban and architectural form. Rather than studying the technical aspects of energy, however, the course focuses on the social and spatial organizations that arise and are dependent on dense and abundant energy, identifying these as carbon form. Despite increasing awareness of environmental issues, architects continue to replicate carbon form, preventing a transition out of our current energy paradigm. Just as the modern movement proposed a new organization for the city based on the realities of industry, this moment demands new organizations that can respond to an urban system that the climate crisis has shown to be obsolete. Unlike in modernism, however, the energy transition to which we must respond has not yet occurred. And yet, architecture must still declare the death of carbon modernity and seek the means to overcome its material and cultural legacy. In this light, the course interrogates the foundations of contemporary human organization in order to lay new foundations for the oncoming transitions in energy and social form. Students study the theoretical roots of carbon form in the works of Le Corbusier, Hilberseimer, Koolhaas, and others, and speculate on new human settlement patterns by examining the relationship between the energy grid and the urban grid, i.e., between energy and urban form. Assignments include readings, reading responses, as well as drawings at the midterm and final. Limited enrollment. Elisa Iturbe

4215b/FILM 842b/HSAR 712b, Approaches to the Urban Screen 3 credits. What distinguishes the urban screen - in terms of spatiality, economics, phenomenology, and technology – from other screens proliferating today? The course aims to think genealogically about the emergence and descent of large-scale urban screens as forms of public display and as new metropolitan interfaces. Today we are witnessing long-standing conceptions of the screen as a surface for the play of representations ceding ground to ecological understandings of the screen as an environmentally embedded node and as a point of dynamic mediation between actors and the world. Considering materials from film history, architectural history, art history, and urban history, the seminar considers the urban screen as a crucial part of the broader redefinition of the screen. Urban screens can be understood in terms of a rupture and recovery of screen history, wherein the fracturing of the screen (as movie screen) is coextensive with the recovery of older and alternate understandings of the screen (as facade, as protection, as shelter, as furniture, as filter, as masquerade, as control mechanism). A key aspect of the seminar is to work through the existing frameworks for thinking about urban screens and to propose new approaches that might shape this nascent area of study. In revisiting alternate histories of the screen, the course explores emerging screen cultures and their implications for the future of screen studies. Field trips to the Yale Art Gallery, Yale Center for British Art, Peabody Museum, and Beinecke Library. Limited enrollment. Craig Buckley, Francesco Casetti

4216a, Globalization Space: International Infrastructure and Extrastatecraft 3 credits. This lecture course researches global infrastructure space as a medium of polity. More than networks of pipes and wires under the ground, this infrastructure space is a visible, enveloping urban medium filled with repeatable spatial formulas and spatial products. Lectures visit the networks of trade, communication, tourism, labor, air, rail, highway, oil, hydrology, finance, standard making, and activism. Case studies travel around the world to, for instance, free trade zones in Dubai, IT campuses in South Asia, high-speed rail in Saudi Arabia, cable/satellite networks in Africa, highways in India, a resort in the DPRK, golf courses in China, ISO standards, and automated ports. More than a survey of physical networks and shared protocols, the course also repositions spatial variables in global governance. Infrastructure space may constitute a de facto parliament of decision-making - an intensely spatial extrastatecraft that often spins around irrational desires. Each week, readings, with both evidence and discursive commentary, accompany two lectures and a discussion section. A short midterm paper establishes each student's research question for the term. A final paper completes the requirements of the course. Limited enrollment. Keller Easterling

**4219a, Urban Research and Representation** 3 credits. Every day, architects and urban designers make proposals that shape the public and private realms of the city. This seminar sets out to contextualize the social and political ramifications of these interventions; to intensify the designer's tool kit of deep, sociohistorical research of site and place; and to cultivate a reflexive practice that considers seriously the social responsibilities of both the architect and the urban researcher. In the classroom, and in the field, this seminar introduces a diverse set of methods for studying the urban environment, from the archival and visual to the observational and ethnographic. Limited enrollment. Elihu Rubin

**4220b**, **Port Cities** 3 credits. Historically, port cities around the world have played a crucial role as the nodes of connection and exchange for both local and vast global networks of production, trade, culture, and power. Since the industrial revolution, rapid development of new technologies of transport and communication has challenged the planners and developers of these cities to both adapt and innovate, creating new and hybrid spatial typologies and transforming vast areas of urbanized waterfront and rural hinterland. And now, climate change and its impact on coastal and riparian geographies add an additional layer of complexity and challenge. This seminar considers the changing and persistent patterns, functions, and images of port cities, particularly in the context of their regional and global networks, researching, analyzing, and mapping the architectural and spatial manifestations of those systems. Limited enrollment. Alan J. Plattus

**4221a**, **Introduction to Commercial Real Estate** 3 credits. This seminar introduces commercial real estate. It does not require any prior knowledge of finance, accounting, or taxation policies. Commercial real estate is income-producing property that is built, financed, and sold for investment. This course examines five basic types of commercial real estate (office, industrial, retail, multifamily, and hotel) from the standpoints of the

developer, lender, and investor. Principles of location, financing, timing of market cycles, leasing, ownership structure, and external factors are explored. Students are expected to evaluate assets, partnership interests, and other positions such as debtor interests through valuation measurement, which requires the use of some simple mathematics. An HP-12C calculator or laptop computer with Excel for use in class is required. Students also examine commercial deeds, leases, partnership agreements, and other legal documents. Each student selects a building or development site within New Haven County for a due diligence analysis of zoning, real estate taxes, deeds, liens, market supply and demand, projected income and expenses, and availability of debt. In addition to outof-class assignments, a brief exercise is included during each class. Limited enrollment. Kevin D. Gray

**4222a, History of Landscape Architecture: Antiquity to 1700 in Western Europe** 3 credits. This course presents an introductory survey of the history of gardens and the interrelationship of architecture and landscape architecture in Western Europe from antiquity to 1700, focusing primarily on Italy. The course examines chronologically the evolution of several key elements in landscape design: architectural and garden typologies; the boundaries between inside and outside; issues of topography and geography; various uses of water; organization of plant materials; and matters of garden decoration, including sculptural tropes. Specific gardens or representations of landscape in each of the four periods under discussion – Ancient Roman, medieval, early and late Renaissance, and Baroque – are examined and situated within their own cultural context. Throughout the seminar, comparisons of historical material with contemporary landscape design are emphasized. Limited enrollment. Bryan Fuermann

**4223b, History of British Landscape Architecture: 1500 to 1900** 3 credits. This seminar examines chronologically the history of landscape architecture and country-house architecture in Britain from 1500 to 1900. Topics of discussion include the history of the castle in British architecture and landscape architecture; Italian and French influences on the seventeenth-century British garden; military landscaping; the Palladian country house and British agricultural landscape; Capability Brown's landscape parks; theories of the picturesque and of the landscape sublime; Romanticism and the psychology of nature; the creation of the public park system; arts and crafts landscape design; and the beginnings of landscape modernism. Comparisons of historical material with contemporary landscape design, where appropriate, are made throughout the term. The collection of the Yale Center for British Art is used for primary visual material, and a trip to England over spring break, partially funded by the School, allows students to visit firsthand the landscape parks studied in this seminar. Limited enrollment. Bryan Fuermann

**4224a**, **Out of Date: Expired Patents and Their Unrealized Histories since the Nineteenth Century** 3 credits. What if the U.S. Army Corps of Engineers had developed "soft infrastructures" and "living systems" for dealing with the changing flows of the Mississippi in and around New Orleans? What if Henry Ford had used soy protein for automotive parts and synthetic meats in the 1940s? Or what if South Asian nation-states had adopted the Ganges Water Machine model in the 1970s to address critical water shortages in urban areas? What do these three seemingly disparate examples all have in common? Each is based on a patent or series of patents that were never adopted for one reason or another. These are just a few of the questions that animate this course. Historians ask the why and the how, but they are rarely trained to visualize what a city, a meal, or a landscape might have looked like had a particular technology or living system been adopted. Rather than shy away from such counterfactuals, this seminar explores and seeks to visualize these historical what-ifs by taking a comparative, global perspective on the history of patents as visual and textual artifacts. Limited enrollment. Anthony Acciavatti

**4233b**, **Ghost Towns** 3 credits. This is an advanced, interdisciplinary seminar in architectural history, urban planning, vernacular building, the politics of preservation, collective memory, tourism, and, ultimately, urban sustainability. Looking at a broad spectrum of failed or almost-failed cities in the United States and across the globe, this seminar uses the ghost town and its rhythms of development and disinvestment to establish a conceptual framework for contemporary urban patterns and processes. Students develop skills in urban and architectural research methods, visual and formal analysis, effective writing, and critical reasoning. Limited enrollment. Elihu Rubin

**4042a, Introduction to Planning and Development** 3 credits. This course demonstrates the ways in which financial and political feasibility determine the design of buildings and the character of the built environment. Students propose projects and then adjust them to the conflicting interests of financial institutions, real estate developers, civic organizations, community groups, public officials, and the widest variety of participants in the planning process. Subjects covered include housing, commercial development, zoning, historic preservation, parks and public open space, suburban subdivisions, and comprehensive plans. Alexander Garvin

**4291c**, **The Urban Atlas: Morphology, Typology, and Thick Space** 3 credits. This program, based in the collaboration between the Yale School of Architecture and the Architecture Department at Chalmers University of Technology in Gothenburg, Sweden, introduces Yale students to the rigorous study of urban form and space and their social uses in relation to the context of historic and contemporary architecture and urbanism in the north of Europe. During an intensive monthlong residency in Gothenburg, Yale students learn and practice methods and techniques of urban analysis, including graphic and modeling approaches to understanding the interface between building form and typology and larger patterns of urban use and movement. Students live, travel, and work together as an integrated research team, contributing to a new Urban Atlas of North European cities. Alan J. Plattus, Andrei Harwell

**4299a or b, Independent Course Work** 3 or 6 credits. Program to be determined with a faculty adviser of the student's choice and submitted, with the endorsement of the study area coordinator, to the Rules Committee for confirmation of the student's eligibility under the rules. (See the School's *Academic Rules and Regulations*. Available for credit to fulfill the M.Arch. I Urbanism and Landscape elective requirement with the approval of the study area coordinators.)

### ELECTIVES OUTSIDE OF SCHOOL OF ARCHITECTURE

Courses offered elsewhere in the University may be taken for credit with permission of the instructor. Unless otherwise indicated, at the School of Architecture full-term courses are typically assigned 3 credits; half-term courses are assigned 1.5 credits. Students must have the permission of the Urbanism and Landscape Study Area coordinators in order for a course to count as an urbanism elective.

# Admissions

The admission process is designed to enroll students of the highest promise while assuring a wide diversity of backgrounds and aptitudes within the student body.

### GENERAL ADMISSION REQUIREMENTS

Students matriculate only at the beginning of each academic year. All students are expected to attend full-time.

Notifications of admission and of financial aid award, if applicable, are sent no later than April 1. Acceptance of the offer of admission, including a nonrefundable deposit of \$750, must be made electronically by April 15. This deposit will be credited toward tuition. Acceptances may not be deferred.

International students should refer to the chapter International Students for information regarding additional admission requirements.

Visit http://architecture.yale.edu for further information about the School. For admission inquiries, contact gradarch.admissions@yale.edu or telephone 203.432.2296. For financial aid inquiries, contact archfinancialaid@yale.edu or telephone 203.432.2291.

# M.ARCH. I: THREE-YEAR PROGRAM ADMISSION REQUIREMENTS

The School believes that the educational experience of its program is enriched by students who have diverse educational backgrounds and, therefore, embraces students who in their undergraduate education have majored in a wide spectrum of disciplines, from architecture to any of the arts, sciences, or humanities.

Applicants to the M.Arch. I program must hold a bachelor's degree, or the equivalent, from an accredited college or university. The following college-level courses are required as prerequisites to this program, all to be completed by June 1 of the year matriculating:

- 1. A studio course such as freehand drawing, sketching, painting, sculpture, or basic architectural design. (Ceramics, photography, graphics, or film will not satisfy this requirement.)
- 2. Two courses in the history of art and/or architecture. It is recommended that one course be a survey, the other a course in modern architecture.

Also recommended, but not required, is a course in classical physics.

### Transfer

Students with exceptional promise may be accepted to the M.Arch. I program under one of the following special conditions:

- 1. After completion, in high standing, of at least one year in an accredited graduate program in architecture, a student may receive credit for some or all course work.
- 2. After completion, in high standing, of the fourth year of an accredited five-year undergraduate program in architecture, a student may be accepted into the M.Arch. I program with the following provisions: a minimum of one year to qualify for the B.Arch.

degree (retained by the School solely to accommodate those few students needing it as a prerequisite in order to work for the M.Arch. degree, but conferred only upon successful completion of work for the M.Arch. degree) and a minimum of an additional two years to qualify for the M.Arch. degree.

# M.ARCH. II: TWO-YEAR PROGRAM ADMISSION REQUIREMENTS

Applicants to the M.Arch. II program must hold a five-year bachelor of architecture (B.Arch.) degree, or an equivalent first professional degree (a B.A. or B.S. with a major in architecture is not considered a first professional degree).

### M.E.D. PROGRAM ADMISSION REQUIREMENTS

The M.E.D. program accepts qualified applicants with a degree in architecture, or with an undergraduate or graduate degree in a related discipline, who exhibit a strong capability for independent advanced study in a topic related to architecture and environmental design.

Candidates are selected on the basis of academic and/or professional records and individual research proposals. (See details on the submission of the research proposal below and in the chapter Master of Environmental Design Degree Program.)

# PH.D. PROGRAM ADMISSION REQUIREMENTS AND APPLICATION PROCESS

Applicants to the Ph.D. program should refer to the chapter Doctor of Philosophy Program.

# APPLICATION PROCESS M.ARCH. AND M.E.D. PROGRAMS

Application to the School is an online process. While completing the online application form, students will be asked to supply information regarding themselves, their education, their test scores, and their references; upload their transcripts, personal essay, and curriculum vitae (résumé); and pay an application fee. In addition, applicants for the M.Arch. programs will be required to upload a portfolio. Applicants for the M.E.D. program will be required to upload a research proposal. See below for more detailed information on each required component of the application process.

The online application can be accessed at https://apply.architecture.yale.edu/apply, when it is available. Applications for programs beginning in the 2020–2021 academic year must be submitted no later than January 2, 2020. Applicants will not be allowed to submit applications after the deadline has passed.

Since all required admissions materials must be uploaded to the online application, applicants should *not* send any materials directly to the School. *Any materials received directly from an applicant will not be added to the applicant's admission file.* 

**Application fee** Applications will be considered submitted only when payment of a nonrefundable application fee has been received. For the 2020–2021 academic year the application fee is \$90. This fee cannot be waived and cannot be credited to tuition or other accounts upon admission. The only acceptable method of payment of the application fee is by credit or debit card, a transaction that is made within the online application. Wire transfers cannot be accepted.

**Transcripts** A transcript or academic record indicating degree earned or anticipated is required from each college or university attended and listed in the Academic Record section of the online application. Applicants will need to upload a scanned copy of the applicant's official transcript or academic record to the application (please ensure that the scanned copy is legible). Refer to the detailed instructions within the online application regarding transcripts/academic records and uploading. Do *not* send a hard copy of a transcript or academic record to the application.

Applicants who have attended international institutions must submit transcripts or certified attestations of study. If such documents are not written in English, certified English translations are required. Once translated, the original transcript as well as the certified translation should be uploaded to the online application.

Applicants expecting to graduate this academic year but still attending their college or university must upload their current, in-progress college or university transcript to the application.

Applicants who are offered admission and who accept that offer will be required to have their respective institutions directly submit final, hard-copy official transcripts to the School.

**Standardized examinations** All applicants, including international students, are required to take the General Test (verbal, quantitative, and analytical writing) of the Graduate Record Examination (GRE) of the Educational Testing Service. For information regarding this test, test dates and locations, and/or to arrange to take the test, visit www.ets.org/gre. Although the test may be taken at any time, it should be taken no later than December preceding the application due date.

The Internet-based Test of English as a Foreign Language (TOEFL iBT) is required of all applicants whose native language is not English. The requirement for the TOEFL iBT may be waived *only* for applicants who have studied in residence for at least three (3) years at a university or college where English is the primary language of instruction and who will have received a baccalaureate degree, or its foreign equivalent, from that institution prior to matriculation at Yale. For further information regarding the test and/or to arrange to take the test, visit www.ets.org/toefl. The TOEFL must be taken no later than December preceding the application due date. IELTS is not accepted as a substitution for the TOEFL iBT examination.

Applicants are required to record their examination scores in the online application for each test date taken. Do not send hard copies. If an applicant retakes either the GRE or the TOEFL iBT after submitting an application and prefers to have the newer scores considered, the applicant should e-mail the Office of Admissions with the new scores at gradarch.admissions@yale.edu. The Yale School of Architecture institution code number for the GRE and TOEFL iBT is 3985. Please note that this is different from other Yale University code numbers. Unless 3985 is used on the test form, applicants' scores will not reach the School.

**Personal essay** An essay, not exceeding one page, that includes a brief personal history and reasons for applying is required and must be uploaded to the online application.

The School of Architecture seeks to draw students from all racial and ethnic groups in society. Applicants who wish to identify themselves as a member of a minority group should do so in this essay.

**Curriculum vitae** A curriculum vitae (résumé of academic and employment experience) is required and must be uploaded to the online application.

**Letters of recommendation** Three letters of recommendation are required and must be uploaded by each recommender no later than January 2, 2020. Letters of recommendation should be from individuals with direct knowledge of the applicant's professional potential and/or academic ability.

Recommendations are submitted only through an online process. When recommenders' e-mail addresses are inserted into the online application, instructions on how to submit recommendations are automatically sent to the recommenders. Therefore, in order to allow recommenders sufficient time to prepare and upload their recommendations, applicants should insert their recommenders' e-mail addresses into the online application as early in the process as possible.

Applicants can verify that their letters of recommendation have been received by the School by viewing the status page of their online application.

**Portfolio** (for the M.Arch. programs only) A digital portfolio (a single pdf document optimized not to exceed 2GB) will need to be uploaded to the online application. The portfolio will be viewed on computer screens.

The portfolio should be a well-edited representation of the applicant's creative work. Portfolios may not contain videos. Anything submitted that is not entirely the applicant's own work must be clearly identified as such.

For the M.Arch. I program, the portfolio should demonstrate the applicant's drawing skills and three-dimensional aptitude. Work represented may include drawings, paintings, sculpture, sketches, furniture and architectural designs, or other materials.

For the M.Arch. II program, the portfolio should demonstrate the applicant's ability to pursue advanced work in architectural design.

**Research proposal** (for the M.E.D. program only) A full and specific description of the applicant's research proposal is required to be uploaded to the online application form. This proposal must include a statement of goals, a proposed study plan, and anticipated results. This submission is weighted heavily during the application review process and is considered in the assignment of faculty advisers. Do not send a hard copy of the proposal that has been uploaded to the application.

Preparation of the proposed study plan is an important part of the application process. As a guide to applicants, the following themes should be included in the proposed study plan:

- 1. Define a specific topic area and the goal of the study plan. List the prior work, publications, or other key references that provide the background or basis of study in the topic.
- 2. Define the key questions that might be answered or the important issues that would be addressed by the study. Describe proposed study methods and expected results.
- 3. List the Yale courses that will support the study. Include a tentative schedule or plan of study over the four terms.
- 4. Describe prior work relevant to the proposed topic, as well as career expectations in undertaking the study. Include examples of written papers, reports, and other documentation that illustrate a capability to carry out the proposed study.

Applicants are invited to submit a draft of the study plan to the M.E.D. program director well in advance of the application deadline, in order to receive comments on it prior to the final application.

**Verification of application credentials** It is the policy of the School of Architecture to verify all credentials, such as transcripts, recommendations, and standardized test scores, as well as other information submitted in support of an application. By submission of an application, applicants automatically grant consent for such verification. Should it be determined at any time that any credential or other information submitted during the application process has been misrepresented, the University reserves the right to rescind the offer of admission and to prevent registration.

# Tuition and Fees

### TUITION

The tuition fee for the academic year 2019–2020 is \$52,520. This tuition fee includes health care services under Yale Health, but does not include the hospitalization insurance fee. The Corporation of Yale University reserves the right to revise tuition rates as necessary.

### FEES

An annual fee of \$1,200 is charged to the Student Financial Services bill for use of the School of Architecture's shops, computers, printers, and other equipment furnished by the School. This mandatory fee applies to all students and is refundable only upon withdrawal from the School, according to the tuition rebate and refund policy itemized below.

### TOTAL COST OF EDUCATION

For a single student living off campus in the 2019–2020 academic year, a reasonable, albeit modest, estimate of total cost may be estimated by the following costs to be \$77,030 for all students.

Tuition	\$52,520
Fees	1,200
Yale Health Hospitalization/Specialty Coverage	2,450*
Room and Board	15,580
Books/Personal Expenses	5,280
	\$77,030

\*Students may receive a waiver of the \$2,450 hospitalization fee from Yale Health upon evidence that they have valid and sufficient alternative hospitalization coverage. Further information regarding health services can be found in the chapter Yale University Resources and Services.

### STUDENT ACCOUNTS AND BILLS

Student accounts, billing, and related services are administered through the Office of Student Financial Services, which is located at 246 Church Street. The office's website is http://student-accounts.yale.edu.

### Bills

Yale University's official means of communicating monthly financial account statements is through the University's Internet-based system for electronic billing and payment, Yale University eBill-ePay. Yale does not mail paper bills.

Student account statements are prepared and made available twelve times a year at the beginning of each month. Payment is due in full by 4 p.m. Eastern Time on the first business day of the following month. E-mail notifications that the account statement is available on the University eBill-ePay website (http://student-accounts.yale.edu/ebep)

are sent to all students at their official Yale e-mail addresses and to all student-designated proxies. Students can grant others proxy access to the eBill-ePay system to view the monthly student account statements and make online payments. For more information, see http://sfas.yale.edu/proxy-access-and-authorization.

Bills for tuition, room, and board are available during the first week of July, due and payable by August 1 for the fall term; and during the first week of November, due and payable by December 1 for the spring term. The Office of Student Financial Services will impose late fees of \$125 per month (up to a total of \$375 per term) if any part of the term bill, less Yale-administered loans and scholarships that have been applied for on a timely basis, is not paid when due. Nonpayment of bills and failure to complete and submit financial aid application packages on a timely basis may result in the student's involuntary withdrawal from the University.

No degrees will be conferred and no transcripts will be furnished until all bills due the University are paid in full. In addition, transcripts will not be furnished to any student or former student who is in default on the payment of a student loan.

The University may withhold registration and certain University privileges from students who have not paid their term bills or made satisfactory payment arrangements by the day of registration. To avoid delay at registration, students must ensure that payments reach Student Financial Services by the due dates.

### Payments

There are a variety of options offered for making payments. Yale University eBill-ePay (http://student-accounts.yale.edu/ebep) is the *preferred* means for payment of your monthly student account bill. The ePayments are immediately posted to the student account. There is no charge to use this service. Bank information is password-protected and secure, and a printable confirmation receipt is available. On bill due dates, payments using the eBill-ePay system can be made up to 4 p.m. Eastern Time in order to avoid late fees.

For those who choose to pay the student account bill by check, a remittance advice and mailing instructions are included with the online bill available on the eBill-ePay website. All bills must be paid in U.S. currency. Checks must be payable in U.S. dollars drawn on a U.S. bank. Payments can also be made via wire transfer. Instructions for wire transfer are available on the eBill-ePay website.

Yale does not accept credit card payments.

A processing charge of \$25 will be assessed for payments rejected for any reason by the bank on which they were drawn. In addition, the following penalties may apply if a payment is rejected:

- 1. If the payment was for a term bill, late fees of \$125 per month will be charged for the period the bill was unpaid, as noted above.
- 2. If the payment was for a term bill to permit registration, the student's registration may be revoked.
- 3. If the payment was given to settle an unpaid balance in order to receive a diploma, the University may refer the account to an attorney for collection.

# Yale Payment Plan

The Yale Payment Plan (YPP) is a payment service that allows students and their families to pay tuition, room, and board in ten equal monthly installments throughout the year based on individual family budget requirements. It is administered by the University's Office of Student Financial Services. The cost to enroll in the YPP is \$100 per contract. For enrollment deadlines and additional details concerning the Yale Payment Plan, see http://student-accounts.yale.edu/ypp.

# Tuition Rebate and Refund Policy

On the basis of the federal regulations governing the return of federal student aid (Title IV) funds for withdrawn students, the following rules apply to the rebate and refund of tuition. For students in the Master of Architecture I (M.Arch. I) degree program, the rules apply to students adhering to the prescribed course of study as previously defined.

- 1. For purposes of determining the refund of Title IV funds, any student who withdraws from the School of Architecture for any reason during the first 60 percent of the term will be subject to a pro rata schedule that will be used to determine the amount of Title IV funds a student has earned at the time of withdrawal. A student who withdraws after the 60 percent point has earned 100 percent of the Title IV funds. In 2019–2020, the last days for refunding Title IV funds will be October 28, 2019, in the fall term for all students. In the spring term, the dates are April 25, 2020, for M.Arch. I first-year students; March 27, 2020, for M.Arch. I second-year students; and March 25, 2020, for all other students.
- 2. For purposes of determining the refund of institutional aid funds and for students who have not received financial aid:
  - a. 100 percent of tuition will be rebated for withdrawals that occur on or before the end of the first 10 percent of the term. In the fall term, the date is September 7, 2019, for all students. In the spring term, the dates are January 23, 2020, for M.Arch. I first-year students; January 19, 2020, for M.Arch. I second-year students; and January 18, 2020, for all other students.
  - b. A rebate of one-half (50 percent) of tuition will be granted for withdrawals that occur after the first 10 percent but on or before the last day of the first quarter of the term. In the fall term, the date is September 23, 2019, for all students. In the spring term, the dates are February 16, 2020, for M.Arch. I first-year students; and February 3, 2020, for all other students.
  - c. A rebate of one-quarter (25 percent) of tuition will be granted for withdrawals that occur after the first quarter of a term but on or before the day of midterm. In the fall term, the date is October 19, 2019, for all students. In the spring term, the dates are April 10, 2020, for M.Arch. I first-year students; March 1, 2020, for M.Arch. I second-year students; and February 29, 2020, for all other students.
  - d. Students who withdraw for any reason after midterm will not receive a rebate of any portion of tuition.
- 3. The death of a student shall cancel charges for tuition as of the date of death, and the bursar will adjust the tuition on a pro rata basis.

- 4. If the student has received student loans or other forms of financial aid, funds will be returned in the order prescribed by federal regulations; namely, first to Federal Direct Unsubsidized Loans, if any; then to Federal Direct Graduate PLUS Loans; next to any other federal, state, private, or institutional scholarships and loans; and, finally, any remaining balance to the student.
- 5. Recipients of federal and/or institutional loans who withdraw are required to have an exit interview before leaving Yale. Students leaving Yale receive instructions on completing this process from Yale Student Financial Services.

# Financial Assistance for the Master's Programs

The School of Architecture is committed to being financially accessible to students of all backgrounds and from all over the world. Financial aid, consisting of need-based scholarship and/or loans, is offered to the School's students with demonstrated need.

Barring any significant changes in a student's financial circumstances (including spousal and, if appropriate, parental circumstances), students can generally expect their need-based scholarship awards to be renewed in subsequent years.

When appropriate, the School will offer a need-based scholarship award based upon the larger of two categories of scholarship calculation. An *Individual Resource Scholarship* is intended for students who do not wish to or who are unable to provide parental financial information. A *Family Resource Scholarship* is intended for students who wish to and are able to provide parental financial information. For a student with limited family resources, a Family Resource Scholarship may yield a higher scholarship award than from an Individual Resource Scholarship. Submitting parental resource information will not affect the calculation of an Individual Resource Scholarship award.

U.S. citizens and permanent residents may be offered loans, including a Federal Direct Loan and/or a Federal Direct Graduate PLUS Loan. Non-U.S. citizens and non-permanent residents may be offered a Yale International Student Loan.

#### THE APPLICATION PROCESS FOR FINANCIAL AID

Application for financial aid is a separate process from application for admission to the School. Applying for financial aid does not affect admission decisions.

### U.S. Citizens and Permanent Residents

U.S. citizens or permanent residents who wish to apply for financial aid must complete and submit the following: (1) a Yale School of Architecture Application for Financial Aid; (2) the Free Application for Federal Student Aid (FAFSA); and (3) the top portion of the School of Architecture Asset Verification and Loan Request Form.

The Yale School of Architecture Application for Financial Aid and the Asset Verification and Loan Request Form are available online at http://architecture.yale.edu/ admissions/financial-aid. These forms must be received by the School by no later than February 1, 2020. The forms may be sent via e-mail to archfinancialaid@yale.edu; via fax to 203.432.6576; or via mail to: Financial Aid Office, Yale School of Architecture, P.O. Box 208242, New Haven CT 06520-8242.

The Free Application for Federal Student Aid (FAFSA) is available online at https:// fafsa.ed.gov. The deadline for completing the FAFSA application is February 1, 2020. The Yale School of Architecture's FAFSA code number is 001426.

If an applicant would like to be considered for a Family Resource Scholarship, parental income and asset information may be provided in the FAFSA. For separated, divorced, or unmarried parents, one parent may complete the FAFSA, in which case the other parent must complete and submit a Yale School of Architecture Parent Financial Statement. If parents do not wish to complete the FAFSA, each parent must complete and submit a separate Parent Financial Statement. Parental information submitted in the Parent Financial Statement will not be released to applicants without parental consent. The Yale School of Architecture Parent Financial Statement may be found at http://architecture.yale.edu/admissions/financial-aid and must be submitted directly to the School's Financial Aid Office via e-mail to archfinancialaid@yale.edu; via fax to 203.432.6576; or via mail to: Financial Aid Office, Yale School of Architecture, P.O. Box 208242, New Haven CT 06520-8242.

If full parental information is not provided, an applicant will be considered only for an Individual Resource Scholarship.

Because scholarship money and some loan funds are limited, applicants who miss the February 1 application deadline may jeopardize their eligibility for financial aid. Applicants who are accepted for admission and who have correctly completed their financial aid application by the February 1 deadline will receive a financial aid determination shortly after the online notification of admission.

### Non-U.S. Citizens and Non-Permanent Residents

Non-U.S. citizens and non-permanent residents who wish to apply for financial aid must complete and submit the following: (1) a College Board International Student Financial Aid Application; (2) a College Board International Student Certification of Finances; and (3) the School of Architecture Asset Verification and Loan Request Form. These forms may be obtained online at http://architecture.yale.edu/admissions/international-students.

The forms must be received by the School by no later than February 1, 2020. The forms may be sent by e-mail to archfinancialaid@yale.edu; via fax to 203.432.6576; or via mail to: Financial Aid Office, Yale School of Architecture, P.O. Box 208242, New Haven CT 06520-8242, USA.

If an applicant would like to be considered for a Family Resource Scholarship, parental income and asset information must be provided in the two College Board international forms. For separated, divorced, or unmarried parents, each parent must complete and submit a separate set of the College Board international forms.

If full parental information is not provided, an applicant will be considered only for an Individual Resource Scholarship.

Because scholarship money and some loan funds are limited, applicants who miss the February 1 application deadline may jeopardize their eligibility for financial aid. Applicants who are accepted for admission and who have correctly completed their financial aid application in a timely manner will receive a financial aid determination shortly after the online notification of admission.

### GENERAL FINANCIAL AID POLICIES

After admission to the Yale School of Architecture, students who have been awarded financial aid are required to complete a verification process. For U.S. citizens or permanent residents, this process includes submission of the student's federal tax returns, another completed School of Architecture Asset Verification and Loan Request Form, and, if a Family Resource Scholarship is awarded, the parents' federal tax returns. For international students, this process includes submission of a School of Architecture Asset Verification and Loan Request Form and, if a Family Resource Scholarship is awarded, submission (translated into English) of the parents' tax returns or alternative documentation of income.

The School reserves the right to adjust a student's financial aid award if the actual income or asset information of the parent, student, or spouse is different from the original information included on the financial aid application(s). In addition, for U.S. citizens and permanent residents, all awards are contingent on the student meeting the general eligibility requirements specified by the U.S. Department of Education, including Satisfactory Academic Progress (SAP) requirements (below).

Applicants in default on a student loan will not be eligible for any financial aid until the default status has been cleared and documentation provided to the Financial Aid Office.

Students on financial aid are required to reapply for financial aid each spring for the following academic year. Financial aid does not extend longer than the normal equivalent length of time required to complete the program of study to which the student was admitted.

#### OUTSIDE AID

All students are encouraged to seek additional funding beyond what is available from the School of Architecture. A helpful website for students to search for third-party scholar-ships is www.finaid.org.

Some state and private supplemental loan programs offer funds to students who require loan assistance in excess of the annual borrowing limits for the federal loan programs, or who are not eligible for the federal loan programs.

Additional information on financial aid may be found at www.yale.edu/sfas/finaid/ graduate-and-professional-students.

In order to comply with federal regulations as well as University policy, students must advise the Financial Aid Office of any additional awards received (scholarships, grants, loans, VA benefits, teaching assistantships, teaching fellowships, etc.). As a general rule, outside awards up to \$10,000 can be received without affecting the student's need-based scholarship from the School of Architecture, although it may be necessary to reduce the student's loan(s). Outside assistance in excess of \$10,000 will likely affect a student's need-based scholarship from the School of Architecture.

If a third party (employer or other sponsor) is to pay all or a part of the cost of education and requires a bill in its name, the student must provide documentation from the sponsor detailing the terms of the sponsorship, to include: what charges are covered, the duration of the sponsorship, and the sponsor's billing requirements and contact information. In addition, the student must submit written authorization allowing Yale University to communicate with and release student account billing information to the sponsoring third party as necessary. This information is due by June 1 and October 1 for the fall and spring terms, respectively. A copy of the award letter or scholarship notice, along with written authorization, should be e-mailed to ebep@yale.edu.

# SATISFACTORY ACADEMIC PROGRESS (SAP) AND FINANCIAL AID

Federal regulations require that in order to receive assistance under Title IV of the Higher Education Act, students must be making Satisfactory Academic Progress (SAP), which is measurable academic progress toward completion of their degree requirements within published time limits. The following SAP policy applies to all enrolled students.

# Guidelines for Academic Progress

The academic year at the Yale School of Architecture consists of fall and spring terms and summer courses. SAP is calculated twice per year, at the end of the fall and spring terms. A student's SAP status at the beginning of a term is effective until the completion of that enrolled term. Students must maintain SAP in both qualitative and quantitative standards.

**Qualitative standards** At the end of a term, students who are placed on "academic probation" for the next term due to their grades during the prior term fail to meet the qualitative SAP standard (refer to Section II.G of the *School of Architecture Handbook*, http:// architecture.yale.edu/academics/school-handbook, for the definition of "academic probation"). All other students meet the qualitative SAP standard.

**Quantitative standards** A student meets the quantitative SAP standard if a pace is maintained of earning at least one-half (50 percent) of the total credits attempted. "Incompletes" do not count as credits attempted (refer to Section II.H.1 of the *School of Architecture Handbook*, http://architecture.yale.edu/academics/school-handbook, for information on "Incompletes"). "Withdrawals" count as credits attempted (refer to Section II.B. of the *School of Architecture Handbook*, http://architecture.yale.edu/academics/school-handbook, for information on "Incompletes"). "Withdrawals" count as credits attempted (refer to Section II.B. of the *School of Architecture Handbook*, http://architecture.yale.edu/academics/school-handbook, for information on "Withdrawals"). Credits for completed repeated courses count as both credits attempted and earned. Transfer credits are not accepted. The maximum time frame in which a student must complete degree requirements cannot exceed more than 200 percent of the minimum time for fulfilling degree requirements (refer to Section II.D. of the *School of Architecture Handbook*, http://architecture.yale.edu/academics/school-handbook).

# Financial Aid Warning

A student who fails to meet SAP at the end of a term will be notified in writing by the assistant dean responsible for academic matters, and the Financial Aid Office will place the student on "financial aid warning" until the end of the next term. During the "financial aid warning" term, the student may receive financial aid, despite the determination of not meeting SAP. Students on "financial aid warning" who fail to return to SAP by the end of the term will lose their future financial aid eligibility, unless they successfully appeal and are placed on "financial aid probation."

# Financial Aid Probation and Appeals

A student who has not successfully met SAP by the end of the "financial aid warning" term has the right to appeal the loss of financial aid eligibility. Appeals must be submitted to the Dean's Office in writing within two weeks of receiving notice that the student did not meet SAP after a term on "financial aid warning." The appeal must include information about why the student failed to meet SAP, and what has changed, or is expected to change, that will allow the student to meet SAP in the future. The written appeal should be accompanied by documentation that verifies the extenuating circumstances (e.g., death of a relative, an injury or illness of the student, or other special circumstances). The Dean's Office shall notify the student of the outcome of the appeal within ten business days of receiving it. If the appeal is approved, the student is placed on "financial aid probation" until the end of the next term, and may receive financial aid during that term. Students on "financial aid probation" are required to meet with the assistant dean responsible for academic matters to establish an individual academic plan to enable the student to meet SAP at some point in the future, according to specific benchmarks established by the plan. Students on "financial aid probation" who fail to meet SAP by the end of the "financial aid probation" term, or fail to meet the benchmarks of their individual plans on time, will not be eligible for financial aid for the subsequent academic term. Students who are ineligible for financial aid may reestablish eligibility in future terms by meeting SAP.

### ADDITIONAL INFORMATION

Students who have additional questions regarding financial aid should contact the Financial Aid Office, Yale School of Architecture, PO Box 208242, New Haven CT 06520-8242, telephone 203.432.2291.

## BENEFITS FROM THE U.S. DEPARTMENT OF VETERANS AFFAIRS

Eligible students are strongly encouraged to seek specific information about GI Bill Education benefits from the Department of Veterans Affairs at 888.442.4551 or www. benefits.va.gov/gibill. The Registrar's Office will be happy to assist students with claims once they are enrolled.

For information on the Yellow Ribbon program, visit https://finaid.yale.edu/ award-letter/financial-aid-terminology/yellow-ribbon-program.

### TEACHING AND RESEARCH OPPORTUNITIES

The School offers teaching fellowships, teaching assistantships, and research assistantships. Students appointed as teaching fellows and assistants help faculty in their graduate and undergraduate courses. Research assistants aid faculty in their research. The Teaching Fellowship Program offers stipends (fixed payments); the Teaching Assistantship and Research Assistantship programs offer financial support to students according to the level of teaching or research involvement, and the nature of the course or research in which the student is assisting. Fellowships and assistantships are one-term appointments made by the Dean's Office at the request of the faculty. These appointments are usually made at the end of a term for the following term.

In addition, several departments in Yale College, including History of Art and several foreign languages, often offer teaching fellowships to students in the School who may have an appropriate expertise.

It is not necessary to qualify for financial aid in order to hold any of these appointments, although the earnings from these appointments may be included in determining financial aid awards.

### STUDENT EMPLOYMENT WITHIN THE SCHOOL

The School of Architecture offers students job opportunities within the School that cover a wide variety of needs. Current positions include woodshop or computer monitors, receptionists, exhibition installers, archivists, clerical workers, and Urban Design Workshop employees. It is not necessary to qualify for financial aid in order to hold any of the positions, although the earnings from these positions may be included in determining financial aid awards.

### STUDENT EMPLOYMENT WITHIN THE UNIVERSITY

The Student Employment Office, 246 Church Street, is maintained to give assistance to self-supporting students in obtaining employment outside of the School but within the University during termtime. Student job listings at Yale can be found online at https://www.yalestudentjobs.org.

# EMPLOYMENT OPPORTUNITIES OUTSIDE THE UNIVERSITY

The School is often advised of various employment opportunities outside the University that may interest architectural students, including work in local architectural offices, small architectural jobs, etc. These opportunities are posted for the convenience of students who may be seeking outside work.

# International Students

# ADMISSION REQUIREMENTS FOR INTERNATIONAL STUDENTS

All international student applicants for the 2020–2021 academic year at the Yale School of Architecture must complete the General Test of the Graduate Record Examination (GRE) Program (see Standardized Examinations in the chapter Admissions).

In addition, applicants whose native language is not English are required to take the Internet-based test of English as a Foreign Language (TOEFL iBT), a test that includes a section on spoken English (see Standardized Examinations in the chapter Admissions for further information).

Any transcripts, letters of reference, or other application material written in a language other than English must be accompanied by a certified translation.

In order to receive visa documentation, international students must submit proof that income from all sources will be sufficient to meet expenses for that year of study. Each student accepting admission to the School must submit an *International Student Certification of Finances* form. This form, available from the Registrar's Office or accessible on our website (http://architecture.yale.edu), is due April 15 with acceptance of the admission offer. It must be completed and signed by the parents (and spouse, if applicable) of an international applicant, and must include all bank and tax information.

See the chapter Admissions for further admission requirements.

### LANGUAGE SKILLS

All course work at the School is conducted in English. Enrolled students who have difficulties with the English language, whether written or spoken, will be required to take extra courses in its use before they are promoted within their program. Students requiring such courses are responsible for any added tuition cost(s). Financial aid for such English language courses is not available.

### FINANCIAL AID FOR INTERNATIONAL STUDENTS

See the chapter Financial Assistance for the Master's Programs for information regarding financial aid.

### EMPLOYMENT OPPORTUNITIES AT YALE

The School of Architecture offers international students employment opportunities in a wide variety of positions within the School. The University also has employment opportunities for international students through its Student Employment Office.

# EMPLOYMENT OPPORTUNITIES OUTSIDE OF YALE DURING ENROLLMENT AND AFTER GRADUATION

During full-time enrollment, international M.Arch. students at the School who hold F-1 visa status and who have been enrolled full-time for at least one full academic year may apply for the Curricular Practical Training (CPT) program, which provides the opportunity to be employed in the United States outside of the University. During an academic year, CPT is limited to part-time (no more than twenty hours per week). During summer breaks, CPT is available only for full-time employment.

International M.Arch. students at the School who hold F-1 visa status may apply for the Optional Practical Training (OPT) program, which provides the opportunity to be employed in the United States after graduation for a period of twelve months plus a twenty-four-month STEM extension, for a total of thirty-six months, provided such employment begins within sixty days of graduation.

International M.E.D. students at the School who hold F-1 visa status and who have been enrolled full-time for at least one full academic year may apply for the Optional Practical Training (OPT) program, which provides the opportunity to work in the United States outside of Yale for up to twelve months.

For further details on the CPT and OPT programs, visit http://oiss.yale.edu/ immigration.

### OFFICE OF INTERNATIONAL STUDENTS AND SCHOLARS

The Office of International Students and Scholars (OISS) coordinates services and support for Yale's nearly 6,000 international students, faculty, staff, and their dependents. OISS staff assist with issues related to employment, immigration, and personal and cultural adjustment, as well as serve as a source of general information about living at Yale and in New Haven. As Yale University's representative for immigration concerns, OISS helps students, faculty, and staff obtain and maintain legal nonimmigrant status in the United States. All international students and scholars must register with OISS as soon as they arrive at Yale; see http://oiss.yale.edu/coming-to-yale.

OISS programs, like the Community Friends hosting program, daily English conversation groups, U.S. culture workshops and discussions, bus trips, and social events, provide an opportunity to meet members of Yale's international community and become acquainted with the many resources of Yale University and New Haven. Spouses and partners of Yale students and scholars will want to get involved with the International Spouses and Partners at Yale (ISPY), which organizes a variety of programs.

The OISS website (http://oiss.yale.edu) provides useful information to students and scholars prior to and upon arrival in New Haven, as well as throughout their stay at Yale. International students, scholars, and their families and partners can connect with OISS and the Yale international community virtually through Facebook.

OISS is housed in the International Center for Yale Students and Scholars, which serves as a welcoming venue for students and scholars who want to peruse resource materials, check their e-mail, and meet up with a friend or colleague. Open until 9 p.m.

on weekdays during the academic year, the center—located at 421 Temple Street, across the street from Helen Hadley Hall—also provides meeting space for student groups and a venue for events organized by both student groups and University departments. For more information about reserving space at the center, go to http://oiss.yale.edu/about/ the-international-center/international-center-room-reservations. For information about the center, visit http://oiss.yale.edu/about/international-center.

# Life at the School of Architecture

The School's activities are centered in its landmark building, Paul Rudolph Hall (formerly the Art & Architecture Building), designed between 1958 and 1963 by Paul Rudolph, who was then the chairman of the Department of Architecture. In 2007 Paul Rudolph Hall underwent an extensive renovation overseen by Gwathmey Siegel and Associates Architects, who also designed the adjacent Jeffrey H. Loria Center for the History of Art, which houses the History of Art department. The Robert B. Haas Family Arts Library is also included in this building complex.

The School of Architecture's design studios take advantage of light-filled, loft-like open floors. Students' individual workstations surround common areas where group discussions and reviews take place. Also located within the building are classrooms; exhibition galleries; faculty and administrative offices; and material, wood, metal, computer, and digital-fabrication laboratories. Students have open access to the building twenty-four hours a day throughout the school year.

With a student population of about 200 coming from diverse backgrounds with varying interests and opinions, the School is large enough to support a wide variety of activities and debate. Yet it is small enough to permit students and faculty to know virtually the entire School population as individuals.

Students at the School are encouraged to avail themselves of the entire University. Many students take courses, such as those in history, psychology, studio art, and art history in Yale College and in the Graduate School. Students also take courses in other professional schools such as the School of Forestry & Environmental Studies, the Law School, the Divinity School, and the School of Management.

### LECTURES

Throughout the year, nationally and internationally known architects, architectural scholars, and artists are invited to participate in the School's weekly lecture series. The series is open to the public and is free of charge. In fall 2018, lecturers included:

Tobias Armborst, Architect Francesco Casetti, Film Theorist Anna Dyson, Architecture Ecologist Omar Gandhi, Architect Simon Hartmann, Architect Christopher Hawthorne, Architecture Critic Rossana Hu, Architect Anab Jain, Architect Lyndon Neri, Architect Michael Samuelian, Developer Julie Snow, Architect Georgeen Theodore, Architect In spring 2019, lecturers included:

Esra Akcan, Architectural Historian Iwan Baan, Architecture Photographer Sandra Barclay, Architect Phillip G. Bernstein, Architect Kevin Carmody, Architect Jean Pierre Crousse, Architect Esther da Costa Meyer, Architectural Historian Sou Fujimoto, Architect Timur Galen, Developer Andy Groarke, Architect Nancy Levinson, Architecture Journalist Todd Reisz, Architect Ananya Roy, Urban Theorist Adam Yarinsky, Architect

### SYMPOSIA

During 2018-2019, the School of Architecture sponsored two symposia.

"Natures of Ornament," a one-day symposium on February 23, 2019, convened by Sunil Bald, examined the role of ornament in contemporary architecture discourse as well as the ornament theory of Kent C. Bloomer. Those in attendance heard from the following speakers:

Sunil Bald, Yale University Thomas Beeby, Yale University Deborah Berke, Yale University Kent Bloomer, Yale University Turner Brooks, Yale University Douglas Cooper, Carnegie Mellon University Guru Dev Kaur Khalsa, Architect Emer O'Daly, Architect Richard Prum, Yale University Willie Ruff, Yale University Michael Young, The Cooper Union

"Clouds, Bubbles, and Waves," a three-day J. Irwin Miller symposium on April 4–6, 2019, convened by Sunil Bald, explored Japan's spatial and aesthetic responses to natural disasters and other catastrophes. Sou Fujimoto, Momoyo Kaijima, and Hitoshi Abe delivered the keynote addresses. Those in attendance heard from the following speakers:

Hitoshi Abe, University of California, Los Angeles Anne Allison, Duke University Sunil Bald, Yale University Deborah Berke, Yale University Sou Fujimoto, Architect Momoyo Kaijima, Architect Yoko Kawai, Yale University Akira Mizuta Lippit, University of Southern California Kazumasa Nonaka, Visual Artist Ken Tadashi Oshima, University of Washington Miwako Tezuka, Curator Novmichi Tosa, Product Designer Ryuta Ushiro, Artist Anthony Vidler, The Cooper Union Mimi Yiengpruksawan, Yale University Midori Yoshimoto, New Jersey City University

### EXHIBITIONS

The School maintains an active program of exhibitions. The Architecture Gallery, located on the second floor of Paul Rudolph Hall, is open to the public Monday through Friday, 9 a.m.–5 p.m., and Saturday, 10 a.m.–5 p.m. Exhibitions in 2018–2019 included:

*Adjacencies* August 30–November 15, 2018

*Two Sides of the Border* November 29, 2018–February 9, 2019

Japan, Archipelago of the House February 21–May 4, 2019

Horizon Year-End Exhibition of Student Work May 19–August 2, 2019

### **Student-Curated Exhibitions**

Stepwells of Ahmedabad August 30–October 6, 2018

A Seat at the Table October 11–November 15, 2018

*Redevelopment: The Story of Church Street South* November 29, 2018–January 3, 2019

HUTONGism January 10–February 16, 2019

Sounding Sacred February 21–March 30, 2019

*Let's Talk Business* April 4–May 4, 2019

#### PUBLICATIONS

The School supports two student-edited publications. *Perspecta: The Yale Architectural Journal*, the oldest student-edited architectural journal in the United States, is internationally respected for its contributions to contemporary discourse with original presentations of new projects as well as historical and theoretical essays. *Perspecta*'s editors solicit contributions from distinguished scholars and practitioners from around the world, and then, working with graphic design students from the School of Art, produce the journal. *Retrospecta*, an annual journal that includes samples of student work and activities at the School during each academic year, is edited by students and published by the School.

The School also publishes *Constructs*, a twice-yearly news magazine that highlights activities and events at the School, including interviews with visiting faculty members, articles on issues relevant to what is being analyzed and discussed in the design studios, and previews and reviews of the School's exhibitions and lectures. *Constructs* also covers important non-Yale events, exhibitions, and publications. Back issues may be searched online at http://architecture.yale.edu/publications/constructs.

The School maintains an active publications program (www.architecture.yale.edu/ publications). Books forthcoming in 2019 and early 2020 are:

*Eyes That Saw: Architecture after Las Vegas*, edited by Stanislaus von Moos, former Vincent Scully Visiting Professor of Architectural History, and Martino Stierli, the Philip Johnson Chief Curator of Architecture and Design at the Museum of Modern Art, with publications director Nina Rappaport, features a collection of scholarly essays based on the conference held at Yale celebrating the fortieth anniversary of the 1968 epochal Las Vegas Studio led by Robert Venturi, Denise Scott Brown, and Steven Izenour. Three Yale studios brought students out into the world as a way to both analyze and then design projects and, in doing so, transformed architectural education. The book includes essays by Stan Allen, Eve Blau, Beatriz Colomina, Elizabeth Diller, Peter Fischli, Dan Graham, Neil Levine, David M. Schwarz, Katherine Smith, Martino Stierli, Karin Theunissen, Stanislaus von Moos, and both Robert Venturi and Denise Scott Brown, with a preface by Robert A.M. Stern. The book was designed by Bruno Margreth and is co-published by Yale School of Architecture and Scheidegger & Spiess.

*The Diamonds of American Cities* presents the work of Edward P. Bass Distinguished Visiting Architecture Fellow Janet Marie Smith, vice president of the Los Angeles Dodgers, and Alan Plattus and Andrei Harwell, Yale faculty members, with students of the School of Architecture. The challenge was to analyze ballparks and their urban ramifications in a two-phased project, one each for a minor and a major league team. The students formed four groups and developed proposals for the Pawtucket Red Sox on different New England sites. Critical analysis of the development opportunities for a large-scale sports facility and the consequences on a medium-size city drove the presentations to the Pawtucket team management and informed its move to Worcester, Massachusetts. In the second half of the term the students designed a center-field addition to Dodger Stadium in Los Angeles. The projects encapsulated large and small scales, investigating ideas such as circulation to and from the stadium and the types of concession placed within the structure. The students considered the future of baseball viewership, testing ideas ranging from AR/VR batter's-eye walls to public dugouts. The book features an interview with Smith, an essay by Plattus, and a closing discussion between Stan Kasten, president and CEO of the Los Angeles Dodgers, and Larry Lucchino, president emeritus of the Boston Red Sox. The book was edited by Nina Rappaport and Ron Ostezan ('18), designed by MGMT.Design, and distributed by Actar.

### YALE URBAN DESIGN WORKSHOP

Alan Plattus, Executive Director Andrei Harwell, Director

The Yale Urban Design Workshop and Center for Urban Design Research (YUDW) provides a forum for faculty and students from the School of Architecture and other professional schools at Yale to engage in the study of issues, ideas, and practical problems in the field of urban design. Since its founding in 1992 by Alan Plattus, the YUDW has worked with communities across Connecticut and around the world, providing planning and design assistance on projects ranging from comprehensive plans, economic development strategies, and community visions to the design of public spaces, streetscapes, and individual community facilities.

In all its work, the YUDW is committed to an inclusive, community-based process, grounded in broad citizen participation and a vision of the design process as a tool for community organizing, empowerment, and capacity-building. A typical YUDW project may include design charrettes, focus groups, and town meetings, as well as more conventional means of program and project development. Projects, supervised by the faculty of the School, are staffed mainly by postgraduate associates and current graduate students from the School. Some projects also include work from Yale College undergraduates; faculty and students from Yale's other professional schools, including the Law School, the School of Forestry & Environmental Science, the School of Management, the School of Public Health, and the School of Art; and outside consultants and other local professionals.

Much of the work and research of the YUDW has focused on strategies for regeneration in Connecticut's small postindustrial towns and cities. Neighborhood and downtown plans developed for places like New Britain, West Haven, and Bridgeport have engaged with complex questions of preservation, redevelopment, and shifting demographics and identity; considered the changing economics of urban cores; and encouraged walkability, sustainability, and controlled, coordinated growth. Recently, the YUDW has extended this focus internationally, consulting on the regeneration of Gothenburg, Sweden.

Another area of specific interest and research lies at the intersection between preservation, cultural heritage, redevelopment, tourism, and identity. Projects, including the Thames River Heritage Park in Groton and New London, Connecticut; the Naugatuck Valley Industrial Heritage Trail, funded through a grant from the National Endowment for the Arts; and the Jordan River Peace Park on the Jordan River straddling the border between Israel and Jordan, derive much of their energy from a consideration of the place and representation of history in the city and in contemporary life.

The most recent work of the YUDW has focused on developing and deploying strategies for coastal and urban resilience. As the lead urban designer in a multidisciplinary team that helped Bridgeport, Connecticut, secure \$10 million in the Rebuild By Design competition from HUD, and now part of the team awarded the \$42 million National Disaster Resilience Competition contract, the YUDW has investigated ways to integrate new infrastructure with the public realm, leveraging disaster recovery funds to consolidate community identity and create new connections, while making Bridgeport a safer, more livable place.

#### STUDENT ORGANIZATIONS

Students at Yale have access to a wide range of activities within the School of Architecture and elsewhere in the University or the community. These focus on academic, cultural, political, and community-based interests. At the School, one may join the American Institute of Architecture Students (AIAS) and the National Organization of Minority Architects (NOMA). A student also has the opportunity to be elected to one of several committees, including the Admissions Committee and the Curriculum Advisory Committee. Grassroots initiatives, such as the Leadership, Education, and Athletics in Partnership program (LEAP), the Neighborhood Discovery Program (NDP), the Summer Teen Empowerment Program (STEP), and the Yale Urban Design Workshop (YUDW), invite active participation in community development.

Students have founded many organizations at the School of Architecture including *Paprika!*, the weekly independent student publication; Outlines, the LGBTQ+ student group; Equality in Design (EID); YSOA Christian Fellowship; Green Action in Architecture (GAIA); YSOA East; the Indigenous Scholars of Architecture, Planning and Design (ISAPD); and the YSOA Badminton League; among others.

Outside the School of Architecture, there are many student organizations, including the Black Graduate Student Network (BGN), the Graduate-Professional Student Center at Yale (The Gryphon), the Yale Law School Housing and Community Development Clinic (integrating pro bono legal and architectural services to the New Haven community), and the Women's Center, as well as the many Yale cultural centers. Countless groups offer membership in other endeavors. Among these are the Yale Cabaret, the *Yale Daily News*, the Yale Gospel Choir, and the Yale Russian Chorus. Students may also apply for grants, through Yale University, to support local summer public service internships that already exist or are of a student's own design.

#### FACILITIES

### Robert B. Haas Family Arts Library

Soon after 1868, the Arts Library was established as part of the Yale University Library, one of the great libraries in the world, and in 2008 it was renamed the Robert B. Haas Family Arts Library. Located within the Paul Rudolph Hall–Jeffrey H. Loria Center for the History of Art complex, it contains more than 120,000 volumes on architecture, painting, sculpture, graphic design, urban planning, drama, and the history of art and architecture. It serves as the working library for the School of Architecture, the School of Art, the History of Art department, the School of Drama, and the Yale University Art Gallery, and as an adjunct library for the Yale Center for British Art. The collection includes basic reference works, monographs, exhibition catalogues, an expanding range

of digital resources, and histories of the aforementioned fields, bound periodicals, and subscriptions to more than 500 current periodicals and museum bulletins. Approximately 200,000 additional volumes in these fields may be found in related collections at two other Yale libraries: Sterling Memorial Library and the Library Shelving Facility.

The Haas Family Arts Library staff gladly assists students and faculty in exploring the enormously rich library resources at Yale and offer a wide-ranging instructional program aimed at quickly initiating new members of the community into the complex world of information resources.

# Visual Resources Collection

The Visual Resources Collection, a department of Sterling Memorial Library, is charged with collection development for digital visual media in the fine arts and architecture. Located in the Robert B. Haas Family Arts Library, the Visual Resources Collection offers a Digital Library of more than 370,000 images reflecting faculty teaching and research interests. The historic collections of 35mm slides, lantern slides, and study photographs are archived in the Library Shelving Facility. The staff is available to assist the Yale community with their image needs.

# Fabrication Shops

Graduate and undergraduate students use the School's fabrication shops in support of studio and course work assignments, as well as for independent projects. They include fully equipped facilities for building models, fabricating furniture, sculpting, and exploring building systems. Students work with a wide variety of materials, including wood and wood products, plastics, and ferrous and nonferrous metals. Beyond the normal fabricating equipment and tools usually found in wood and metal shops, the School's equipment includes laser cutters, a waterjet cutter, three-axis CNC mills, and a digitally controlled foam cutter. Students with shop experience may apply to the fabrication shop's coordinator for positions as shop monitors.

All incoming students take the Summer Shops Techniques Course during the week before classes begin. This intensive course teaches students how to work safely in the shop while exposing them to a wide range of tools and procedures. During the year, staff is available to assist students with their projects. Individual instruction is always available from the staff and monitors. First-year M.Arch. I students use the fabrication shops to fabricate elements for the Building Project.

# Advanced Technology Facilities

Advanced technology and integrated information systems are an integral part of the School's curriculum. The School provides students with a high-quality and robust information infrastructure, including cloud-based personal storage for each student and unlimited network storage for individual classes and studios. The School has its own proprietary digital media facilities that consist of cloud-based servers for high-quality distributed information systems; two advanced computer labs; an imaging and 3-D scanning lab; a printing lab with more than fifty 3-D printers able to print in plastic, plaster, clay, and resin; and dedicated printing rooms and plotting clusters outfitted with photocopiers and large-format plotters on each studio floor. All students are provided

with a high-end workstation, preloaded with a wide array of software and integrated design tools, and two LCD monitors. The School also provides facilities and resources for students' design, research, computational, communication, and fabrication needs. In addition, wireless access points are located throughout the studios and classrooms to allow students, if they desire, to supplement their school-supplied computer with their own laptop. The School provides large mobile LCD screens with workstations located in the review spaces. Available for checkout at no cost are digital cameras, drawing tablets, and camcorders. Students at the School also have access to the Center for Collaborative Arts and Media at 149 York Street, an interdisciplinary arts research center that bridges diverse arts disciplines and fosters critical inquiry at the intersections of visual art, design, film, music/sound, performance, and computer science.

### ACADEMIC REGULATIONS

## Grading System

All courses are graded Pass (P), Low Pass (LP), or Fail (F). Credit will be given for any passing grades (P or LP). No credit will be given for a grade of F. For each School of Architecture course, faculty members issue written evaluations of each student. These evaluations remain part of the student's permanent record but are not included on transcripts.

# Course Changes

It is the student's responsibility to maintain an accurate course schedule in the Registrar's Office. *Any change* (drop or add) to the schedule agreed upon at registration should be reported immediately. No adding of courses will be permitted after the second week of any term. A student may drop a course, without grade reporting, up to six weeks from registration. After six weeks from registration until the last day of classes in each term, a student may withdraw from a course. At the time the student withdraws, the notation "Withdraw" will be entered onto the transcript. Course withdrawal forms may be obtained in the Registrar's Office. Between the end of classes in each term and the beginning of the examination period, no student will be permitted to withdraw from any course. If the instructor of a course reports to the registrar that a student has not successfully completed a course from which the student has not formally withdrawn, a grade of F will be recorded in that course.

# **Class Cancellations**

The School of Architecture does not typically cancel classes because of adverse weather conditions. Individual classes may be canceled by instructors on occasion, and makeup classes are scheduled.

# Portfolio Requirement

All students working toward an M.Arch. degree must maintain a digital portfolio of work done in studio courses. Demonstration of professional development acquired outside of School through experiences, such as self-directed research, fellowships, or paid employment, must also be included in the portfolio and identified separately. As such, this necessity of demonstrated professional engagement qualifies international students to participate in Curricular Practical Training (CPT). This portfolio is reviewed by the Design Committee as a way of evaluating the student's progress.

While the student's School portfolio may emphasize the best work of the student's choice, it must also provide comprehensive coverage of the student's work, including each studio project for every term the student is enrolled. Students are encouraged, but not required, to supplement their design studio work with projects from other courses. Such work may be accommodated in a separate section of the portfolio or in a second portfolio.

The portfolio must include the student's name, program, date, and a passport-sized photo on the title page. Each project should be clearly labeled, stating the name of the project, term, date, and instructors.

The digital portfolio must be submitted (uploaded as a pdf) for evaluation at the end of the fourth term for M.Arch. I students and at the end of the second term for M.Arch. II students and before graduation for all M.Arch. students.

To receive a diploma, graduating students are also required to submit to the School a hard-media exact copy (CD or DVD) of their digital portfolio. This copy will be placed in the University Archives, where, upon receipt, it will be open to all researchers.

## Interim Progress Evaluations

After the end of a student's fourth term in the M.Arch. I and second term in the M.Arch. II programs, the Design Committee will evaluate these students for consideration for promotion to the remainder of their program. At their discretion, the Design Committee, based upon their evaluation, may require a student to submit a reworked portfolio at a later date and/or take courses that are not in the normal sequence, take additional course(s) beyond those normally prescribed in order to graduate, take a Required Leave of Absence, or withdraw from the School. Submission of portfolios is required for this review.

Refer to the School's Academic Rules and Regulations for further details regarding academic evaluation.

# Final Progress Evaluation Review

In addition to the completion of degree requirements, in order to graduate, all M.Arch. students must pass a final review conducted by the Design Committee. This final review uses a student's portfolio as a basis for discussion on the student's general design progress. Students who fail the final review may be asked to submit a reworked portfolio at a later date and/or take courses that are not of the normal sequence, take additional courses that may delay graduation, take a Required Academic Leave of Absence, or withdraw from the School. Submission of portfolios is required for this review.

### Commencement

Attendance is required at Commencement exercises for all degree candidates. Special permission to be excused must be obtained from the dean.

### Leaves of Absence

Students are expected to follow a continuous course of study at the School. Students may be granted leaves of absence for periods up to, but not to exceed, one year. Such leaves may be for further career development (professional or scholarship activities) or for personal (such as financial), medical, or parental reasons.

Requests for nonmedical leaves must be submitted before the end of the term immediately preceding the term of the intended leave. Those granted leaves must file formal notice of return two months before the end of the term immediately preceding the return to the School. In all cases, leave requests are subject to review and approval of the Rules Committee, which will, in turn, consult with the appropriate faculty and administration offices of the University. Students are eligible for a personal leave after satisfactory completion of at least a full academic year of study. Students are eligible for a medical or parental leave any time after matriculation.

Students who for medical reasons must take a leave of absence are required to get a written letter from a physician on the staff of Yale Health indicating that they are required to withdraw from their academic work. This letter will go to both the registrar and the chairperson of the Rules Committee. Upon requested re-entry into the School, such students must provide a letter from their doctor stating that the cause of their leave has been remedied. In addition, before re-registering, a student on medical leave must secure written permission to return from a physician at Yale Health. The date of return from a medical leave of absence must be discussed with and approved by the dean to allow for successful completion of course work and requirements.

The School of Architecture reserves the right to place a student on a mandatory medical leave of absence when, on recommendation of the director of Yale Health or the chief of the Mental Health and Counseling department, the dean of the School determines that, because of a medical condition, the student is a danger to self or others, the student has seriously disrupted others in the student's residential or academic communities, or the student has refused to cooperate with efforts deemed necessary by Yale Health and the dean to make such determinations. Each case will be assessed individually based on all relevant factors, including, but not limited to, the level of risk presented and the availability of reasonable modifications. Reasonable modifications do not include fundamental alterations to the student's academic, residential, or other relevant communities or programs; in addition, reasonable modifications do not include those that unduly burden University resources.

An appeal of such a leave must be made in writing to the dean of the School of Architecture no later than seven days from the effective date of the leave.

An incident that gives rise to voluntary or mandatory leave of absence may also result in subsequent disciplinary action.

Students on a leave of absence are not eligible for financial aid, including loans; and in most cases, student loans are not deferred during leaves of absence. Therefore, students who receive financial aid must contact the Financial Aid Office prior to taking a leave of absence. International students who apply for a leave of absence must consult with the Office of International Students and Scholars (OISS) regarding their visa status.

Although students on a leave of absence are not eligible for the use of any University facilities normally available to enrolled students, they may continue to be enrolled in

Yale Health by purchasing coverage through the Student Affiliate Coverage plan. In order to secure continuous health coverage, enrollment in this plan must be requested prior to the beginning of the term in which the student will be on leave or, if the leave commences during the term, within thirty days of the date of determination. Coverage is not automatic; enrollment forms are available from the Member Services Department of Yale Health, 203.432.0246.

Students on leave who do not return at the end of the approved leave, and do not request and receive an extension from the chairperson of the Rules Committee, are automatically dismissed from the School.

# U.S. Military Leave Readmissions Policy

Students who wish or need to interrupt their studies to perform U.S. military service are subject to a separate U.S. military leave readmissions policy. In the event a student withdraws or takes a leave of absence from Yale School of Architecture to serve in the U.S. military, the student will be entitled to guaranteed readmission under the following conditions:

- 1. The student must have served in the U.S. Armed Forces for a period of more than thirty consecutive days;
- 2. The student must give advance written or verbal notice of such service to the registrar and the chairperson of the Rules Committee. In providing the advance notice the student does not need to indicate an intent to return. This advance notice need not come directly from the student, but rather, can be made by an appropriate officer of the U.S. Armed Forces or official of the U.S. Department of Defense. Notice is not required if precluded by military necessity. In all cases, this notice requirement can be fulfilled at the time the student seeks readmission, by submitting an attestation that the student performed the service.
- 3. The student must not be away from the School to perform U.S. military service for a period exceeding five years (this includes all previous absences to perform U.S. military service but does not include any initial period of obligated service). If a student's time away from the School to perform U.S. military service exceeds five years because the student is unable to obtain release orders through no fault of the student or the student was ordered to or retained on active duty, the student should contact the registrar and the chairperson of the Rules Committee to determine if the student remains eligible for guaranteed readmission.
- 4. The student must notify the School within three years of the end of the student's U.S. military service of the intention to return. However, a student who is hospitalized or recovering from an illness or injury incurred in or aggravated during the military service has up until two years after recovering from the illness or injury to notify the School of the intent to return.
- 5. The student cannot have received a dishonorable or bad conduct discharge or have been sentenced in a court-martial.

A student who meets all of these conditions will be readmitted for the next term, unless the student requests a later date of readmission. Any student who fails to meet one of these requirements may still be readmitted under the general readmission policy but is not guaranteed readmission. Upon returning to the School, the student will resume education without repeating completed course work for courses interrupted by U.S. military service. The student will have the same enrolled status last held and with the same academic standing. For the first academic year in which the student returns, the student will be charged the tuition and fees that would have been assessed for the academic year in which the student left the institution. Yale may charge up to the amount of tuition and fees other students are assessed, however, if veteran's education benefits will cover the difference between the amounts currently charged other students and the amount charged for the academic year in which the student left.

In the case of a student who is not prepared to resume studies with the same academic status at the same point where the student left off or who will not be able to complete the program of study, the School of Architecture will undertake reasonable efforts to help the student become prepared. If after reasonable efforts, the School determines that the student remains unprepared or will be unable to complete the program, or after the School determines that there are no reasonable efforts it can take, the School may deny the student readmission.

#### GENERAL REGULATIONS

- Students are required to conform to the regulations established by the School of Architecture. The School of Architecture Handbook contains the School's Academic Rules and Regulations. This handbook can be found online at http://architecture.yale.edu/ academics/school-handbook.
- 2. In order to graduate, students must complete all required and elective course degree requirements listed for their academic program. Students are responsible for ensuring that their own course selections meet their degree requirements.
- 3. It is expected that students will attend all classes regularly. In any course, more than two unexcused absences may result in a failing grade.
- 4. The School reserves the right to require the withdrawal of any student whose work fails to meet the School's requirements or whose conduct is deemed harmful to the School. Refer to the General Conduct and Discipline section of the School of Architecture Handbook for details.
- The School reserves the right to retain examples of a student's work each term for exhibition purposes, and no work may be removed without permission.
- 6. The School reserves the right to photograph students in studio spaces, including at reviews, and to use those photographs in print and digital media. The School may also use images and text derived from student work in print and digital media, giving credit to the author.

### COMMITTEE STRUCTURE

The following committees, composed of faculty members appointed by the dean and elected student representatives, assist the dean in the formulation and implementation of policies governing activities of the School:

1. Executive Committee (permanent and other faculty members). Participates in policy making, operational decisions, and faculty appointments.

- 2. Rules Committee (four faculty members, three students). Reviews, interprets, and implements the Academic Rules and Regulations of the School; recommends policy and procedural changes to the Academic Rules and Regulations of the School; and oversees the Disciplinary Procedures of Unacceptable Conduct. Student representatives are not privy to, nor may they vote on, issues regarding individual student cases.
- Admissions Committee (eight faculty members, four students). Reviews and makes recommendations on admission policies; reviews all applications for admission and makes admission recommendations to the dean.
- 4. Curriculum Committee (dean, assistant dean responsible for curricular affairs, and study area coordinators). Reviews and recommends curriculum changes; is responsible for the development of detailed curriculum for each term.
- 5. Design Committee (design faculty). Discusses and reviews issues that involve the teaching of design; evaluates student design performance.
- 6. M.E.D. Program Committee (faculty members, two students). Acts as directive body for the M.E.D. program and recommends curriculum changes.
- 7. Undergraduate Planning Committee (faculty members). Plans and reviews courses in architecture offered to Yale College undergraduate students; oversees Yale College Architecture major.
- 8. Arts Library Liaison Committee (four faculty members, one student). Advises the Arts Library on acquisition and maintenance issues.
- Joint-Degree Committee (four faculty members). Recommends to the Rules Committee student course of study proposals for the joint degrees with other professional schools of the University.
- 10. Curriculum Advisory Committee (three faculty members, four students). Makes curriculum recommendations to the dean.
- 11. Dean's Advisory Committee on Student Grievances (two faculty members; two members who may be faculty, administrators, or other individuals employed by the University; one student). Implements General Student Grievance Procedures of the Grievance Procedures of the University
- 12. Awards and Prizes Committee (seven faculty members). Makes award and prize recommendations to the faculty.

### FREEDOM OF EXPRESSION

The Yale School of Architecture is committed to the protection of free inquiry and expression in the classroom and throughout the school community. In this, the School reflects the University's commitment to and policy on freedom of expression as eloquently stated in the Woodward Report (Report of the Committee on Freedom of Expression at Yale, 1974). See https://studentlife.yale.edu/guidance-regarding-free-expression-and-peaceable-assembly-students-yale.

# Yale University Resources and Services

Founded in 1701, Yale began as an undergraduate college. In the nineteenth and twentieth centuries Yale added, one by one, the graduate and professional schools that now constitute a major university. Today, a combined total of more than 12,000 students in the undergraduate college, the graduate school, and the twelve professional schools study for thirty-six different degrees. A faculty of more than 4,000 men and women teach and administer programs across a range of disciplines in the sciences and engineering, the social sciences, the humanities, and the arts.

### A GLOBAL UNIVERSITY

Yale continues to evolve as a global university, educating leaders and advancing the frontiers of knowledge across the entire world. The University's engagement beyond the United States dates from its earliest years. Yale has drawn students from abroad for nearly two centuries, and international topics have been represented in its curriculum for the past hundred years and more. Yale aspires to:

- · Be the university that best prepares students for global citizenship and leadership
- Be a worldwide research leader on matters of global import
- · Be the university with the most effective global networks

This year, Yale welcomed the largest number of international students and scholars in its history. The current enrollment of more than 2,800 international students from 121 countries comprises 22 percent of the student body. Yale is committed to attracting the best and brightest from around the world by offering generous international financial aid packages, conducting programs that introduce and acclimate international students to Yale, and fostering a vibrant campus community. The number of international scholars (visiting faculty, researchers, and postdoctoral fellows) has also grown to nearly 2,700 each year.

Yale's globalization is guided by the vice president for global strategy, who is responsible for ensuring that Yale's broader global initiatives serve its academic goals and priorities, and for enhancing Yale's international presence as a leader in liberal arts education and as a world-class research institution. The vice president works closely with academic colleagues in all of the University's schools and provides support and strategic guidance to the many international programs and activities undertaken by Yale faculty, students, and staff.

The Whitney and Betty MacMillan Center for International and Area Studies (https://macmillan.yale.edu) is the University's focal point for teaching and research on international affairs, societies, and cultures.

The Jackson Institute for Global Affairs (http://jackson.yale.edu) seeks to institutionalize the teaching of global affairs throughout the University and to inspire and prepare Yale students for global citizenship and leadership.

The Office of International Affairs (https://world.yale.edu/oia) provides administrative support for the international activities of all schools, departments, centers, and organizations at Yale; promotes Yale and its faculty to international audiences; and works to increase the visibility of Yale's international activities around the globe. The Office of International Students and Scholars (https://oiss.yale.edu) hosts orientation programs and social activities for the University's international community and is a resource for international students and scholars on immigration matters and other aspects of acclimating to life at Yale.

The Yale World Fellows Program (https://worldfellows.yale.edu) hosts fifteen emerging leaders from outside the United States each year for an intensive semester of individualized research, weekly seminars, leadership training, and regular interactions with the Yale community.

The Yale Alumni Association (https://alumni.yale.edu) provides a channel for communication between the alumni and the University and supports alumni organizations and programs around the world.

Additional information may be found on the "Yale and the World" website (https:// world.yale.edu), including resources for those conducting international activities abroad and links to international initiatives across the University.

### CULTURAL RESOURCES

There are many ways to keep up-to-date about campus news and events. These include the YaleNews website, which features stories, videos, and slide-shows about Yale people and programs (http://news.yale.edu); the interactive Yale Calendar of Events (http:// calendar.yale.edu); and the University's social media channels on Facebook, Twitter, Instagram, Tumblr, LinkedIn, and YouTube.

# Yale University Library

The Yale University Library comprises fifteen million print and electronic volumes in more than a dozen different libraries and locations, including Sterling Memorial Library, the Beinecke Rare Book and Manuscript Library, and the Anne T. and Robert M. Bass Library. The library also encompasses an innovative Preservation and Conservation Department that develops and applies leading-edge technology to maintain the library's diverse collections, which range from ancient papyri to early printed books, rare film and recorded music collections, and a growing body of born-digital works and resources. A student-curated exhibit program and the University's emphasis on teaching with original source materials augment students' access to the physical collections and study spaces of all the libraries at Yale, as well as to a full array of online and digital resources. For additional information, please visit http://web.library.yale.edu.

# Yale University Art Gallery

The Yale University Art Gallery was founded in 1832 as an art museum for Yale and the community. Today it is one of the largest museums in the country, holding more than 250,000 objects and welcoming visitors from around the world. The museum's encyclopedic collection can engage every interest. Galleries showcase artworks from ancient times to the present, including vessels from Tang-dynasty China, early Italian paintings, textiles from Borneo, treasures of American art, masks from Western Africa, modern and contemporary art, ancient sculptures, masterworks by Degas, van Gogh, and Picasso, and more. Spanning one and a half city blocks, the museum features more than 4,000 works

on display, multiple classrooms, a rooftop terrace, a sculpture garden, and dramatic views of New Haven and the Yale campus. The gallery's mission is to encourage an understanding of art and its role in society through direct engagement with original works of art. Programs include exhibition tours, lectures, and performances, all free and open to the public. For more information, please visit https://artgallery.yale.edu.

The museum occupies three adjacent structures. The main building, across York Street from the School, completed in 1953, was designed by the distinguished American architect Louis I. Kahn, who was then a member of the architecture faculty. His first important public commission, and the first of four art museums he would design, the building has been acclaimed for its significance to the history of contemporary American architecture. Although it was the first modern-style building on the Yale campus, the Louis Kahn building harmonizes with older structures, including Egerton Swartwout's Italian gothic Old Yale Art Gallery of 1928, to which it is directly connected. In December 2012 the gallery completed a comprehensive expansion and renovation project. The expanded museum unites all three buildings – the landmark Louis Kahn building (1953), the Old Yale Art Gallery (1928), and Street Hall (1866) – into a cohesive whole with a rooftop addition by Ennead Architects (2012).

# Yale Center for British Art

The Yale Center for British Art is a public art museum and research institute that houses the largest collection of British art outside the United Kingdom. Presented to the University by Paul Mellon (Yale College, Class of 1929), the collection reflects the development of British art and culture from the Elizabethan period to the present day. Free and open to the public. Offers exhibitions and programs, including lectures, concerts, films, symposia, tours, and family events. For more information, please visit https://britishart. yale.edu.

The center, across Chapel Street from the Yale University Art Gallery, is Louis Kahn's final work. At the time of his death in 1974, about one-third of the building was constructed and most of the major design decisions had been made. However, the construction drawings were incomplete and many secondary design decisions had not yet been detailed or conceived by Mr. Kahn. To complete the building in the context of his philosophy, Yale hired the architectural firm of Pellecchia and Meyers. Marshall Meyers (M.Arch. 1957) was a student and then a collaborator of Mr. Kahn's. A multiyear project to conserve the iconic building was completed in May 2016.

### Additional Cultural and Social Resources

The Yale Peabody Museum of Natural History, founded in 1866, houses more than thirteen million specimens and objects in ten curatorial divisions: anthropology, botany, entomology, historical scientific instruments, invertebrate paleontology, invertebrate zoology, mineralogy and meteoritics, paleobotany, vertebrate paleontology, and vertebrate zoology. The renowned collections provide crucial keys to the history of Earth and its life-forms, and in some cases are the only remaining traces of animals, plants, and cultures that have disappeared. About 5,000 objects are on public display, including the original "type" specimens – first of its kind – of *Brontosaurus, Stegosaurus*, and *Triceratops*. There are more than eighty endowed lecture series held at Yale each year on subjects ranging from anatomy to theology, and including virtually all disciplines.

More than five hundred musical events take place at the University during the academic year. In addition to recitals by graduate students and faculty artists, the School of Music presents the Yale Philharmonia, the Oneppo Chamber Music Series, the Ellington Jazz Series, the Horowitz Piano Series, New Music New Haven, Yale Opera, Yale Choral Artists, and concerts at the Yale Collection of Musical Instruments. The Yale Summer School of Music/Norfolk Chamber Music Festival presents the New Music Workshop and the Chamber Choir and Choral Conducting Workshop, in addition to the six-week Chamber Music Session. Many of these concerts stream live on the School's website (https://music.yale.edu), the Norfolk website (https://norfolk.yale.edu), and the Collection of Musical Instruments website (https://collection.yale.edu). Additionally, the School presents the Iseman Broadcasts of the Metropolitan Opera Live in HD free to members of the Yale community. Undergraduate organizations include the Yale Bands, the Yale Glee Club, the Yale Symphony Orchestra, and numerous other singing and instrumental groups. The Department of Music sponsors the Yale Collegium, Yale Baroque Opera Project, productions of new music and opera, and undergraduate recitals. The Institute of Sacred Music presents Great Organ Music at Yale, the Yale Camerata, the Yale Schola Cantorum, and many other special events.

The Graduate and Professional Student Senate (GPSS or "Yale G&P Senate") is composed of student-elected representatives from each of the thirteen graduate and professional schools at Yale. Any student enrolled in these schools is eligible to run for a senate seat during fall elections. As a governing body, the GPSS advocates for student concerns and advancement within Yale, represents all graduate and professional students to the outside world, and facilitates interaction and collaboration among the schools through social gatherings, academic or professional events, and community service. GPSS meetings occur on alternating Thursdays and are open to the entire graduate and professional school community, as well as representatives from the Yale administration. GPSS also oversees the management of the Graduate and Professional Student Center, located at 204 York Street. The center provides office and event space for GPSS and other student organizations and houses Gryphon's Pub. For more information, please visit https:// gpsenate.yale.edu.

### ATHLETIC FACILITIES

The Payne Whitney Gymnasium is one of the most elaborate and extensive indoor athletic facilities in the world. This complex includes the 3,100-seat John J. Lee Amphitheater, the site for many indoor varsity sports contests; the Robert J. H. Kiphuth Exhibition Pool; the Brady Squash Center, a world-class facility with fifteen international-style courts; the Adrian C. Israel Fitness Center, a state-of-the-art exercise and weight-training complex; the Brooks-Dwyer Varsity Strength and Conditioning Center; the Colonel William K. Lanman, Jr. Center, a 30,000-square-foot space for recreational/intramural play and varsity team practice; the Greenberg Brothers Track, an eighth-mile indoor jogging track; the David Paterson Golf Technology Center; and other rooms devoted to fencing, gymnastics, rowing, wrestling, martial arts, general exercise, and dance. Numerous physical education classes in dance (ballet, modern, and ballroom, among others), martial arts, zumba, yoga, pilates, aerobic exercise, and sport skills are offered throughout the year. Yale undergraduates and graduate and professional school students may use the gym at no charge throughout the year. Academic term and summer memberships at reasonable fees are available for faculty, employees, postdoctoral and visiting fellows, alumni, and student spouses. Additional information is available online at https://sportsandrecreation.yale.edu.

During the year various recreational opportunities are available at the David S. Ingalls Rink, designed by Eero Saarinen, a 1934 graduate of the School, the McNay Family Sailing Center in Branford, the Yale Outdoor Education Center in East Lyme, the Yale Tennis Complex, and the Golf Course at Yale. Students, faculty, employees, students' spouses, and guests of the University may participate at each of these venues for a modest fee. Up-to-date information on programs, hours, and specific costs is available online at https://sportsandrecreation.yale.edu.

Approximately fifty club sports come under the jurisdiction of the Office of Outdoor Education and Club Sports. Most of the teams are for undergraduates, but a few are available to graduate and professional school students. Yale undergraduates, graduate and professional school students, faculty, staff, and alumni/ae may use the Yale Outdoor Education Center (OEC), which consists of 1,500 acres surrounding a mile-long lake in East Lyme, Connecticut. The facility includes overnight cabins and campsites, a pavilion and dining hall available for group rental, and a waterfront area with supervised swimming, rowboats, canoes, stand-up paddleboards, and kayaks. Adjacent to the lake, a shaded picnic grove and gazebo are available to visitors. In a more remote area of the facility, hiking trails loop the north end of the property; trail maps and directions are available on-site at the field office. The OEC runs seven days a week from the third week of June through Labor Day. For more information, including mid-September weekend availability, call 203.432.2492 or visit https://sportsandrecreation.yale.edu.

Throughout the year, Yale graduate and professional school students have the opportunity to participate in numerous intramural sports activities. These seasonal, team-oriented activities include volleyball, soccer, and softball in the fall; basketball and volleyball in the winter; softball, soccer, ultimate, and volleyball in the spring; and softball in the summer. With few exceptions, all academic-year graduate-professional student sports activities are scheduled on weekends, and most sports activities are open to competitive, recreational, and coeducational teams. More information is available from the Intramurals Office in Payne Whitney Gymnasium, 203.432.2487, or online at https://sportsandrecreation.yale.edu.

#### **RELIGIOUS RESOURCES**

The religious and spiritual resources of the University serve all students, faculty, and staff of all faiths. These resources are coordinated and/or supported through the Chaplaincy (located on the lower level of Bingham Hall on Old Campus); the University Church in Yale in Battell Chapel, an open and affirming ecumenical Christian congregation; and Yale Religious Ministries, the on-campus association of professionals representing numerous faith traditions. This association includes the Saint Thomas More Catholic Chapel and Center at Yale and the Joseph Slifka Center for Jewish Life at Yale, and it supports Buddhist, Hindu, and Muslim life professionals; several Protestant denominational and nondenominational ministries; and student religious groups such as the Baha'i Association, the Yale Hindu Student Council, the Muslim Student Association, the Sikh Student Association, and many others. Hours for the Chaplain's Office during the academic term are Monday through Thursday from 8:30 a.m. to 11 p.m., Friday from 8:30 a.m. to 5 p.m., and Sunday evenings from 5 to 11. Additional information is available at http:// chaplain.yale.edu.

### HEALTH SERVICES

The Yale Health Center is located on campus at 55 Lock Street. The center is home to Yale Health, a not-for-profit, physician-led health coverage option that offers a wide variety of health care services for students and other members of the Yale community. Services include student health, gynecology, mental health, pediatrics, pharmacy, laboratory, radiology, a seventeen-bed inpatient care unit, a round-the-clock acute care clinic, and specialty services such as allergy, dermatology, orthopedics, and a travel clinic. Yale Health coordinates and provides payment for the services provided at the Yale Health Center, as well as for emergency treatment, off-site specialty services, inpatient hospital care, and other ancillary services. Yale Health's services are detailed in the *Yale Health Student Handbook*, available through the Yale Health Member Services Department, 203.432.0246, or online at https://yalehealth.yale.edu/coverage/student-coverage.

# Eligibility for Services

All full-time Yale degree-candidate students who are paying at least half tuition are enrolled automatically for Yale Health Basic Coverage. Yale Health Basic Coverage is offered at no charge and includes preventive health and medical services in the departments of Student Health, Gynecology, Student Wellness, and Mental Health & Counseling. In addition, treatment for urgent medical problems can be obtained twenty-four hours a day through Acute Care.

Students on leave of absence or on extended study and paying less than half tuition are not eligible for Yale Health Basic Coverage but may enroll in Yale Health Student Affiliate Coverage. Students enrolled in the Division of Special Registration as nondegree special students or visiting scholars are not eligible for Yale Health Basic Coverage but may enroll in the Yale Health Billed Associates Plan and pay a monthly fee. Associates must register for a minimum of one term within the first thirty days of affiliation with the University.

Students not eligible for Yale Health Basic Coverage may also use the services on a fee-for-service basis. Students who wish to be seen fee-for-service must register with the Member Services Department. Enrollment applications for the Yale Health Student Affiliate Coverage, Billed Associates Plan, or Fee-for-Service Program are available from the Member Services Department.

All students who purchase Yale Health Hospitalization/Specialty Coverage (see below) are welcome to use specialty and ancillary services at Yale Health Center. Upon referral, Yale Health will cover the cost of specialty and ancillary services for these students. Students with an alternate insurance plan should seek specialty services from a provider who accepts their alternate insurance.

# Health Coverage Enrollment

The University also requires all students eligible for Yale Health Basic Coverage to have adequate hospital insurance coverage. Students may choose Yale Health Hospitalization/ Specialty Coverage or elect to waive the plan if they have other hospitalization coverage, such as coverage through a spouse or parent. The waiver must be renewed annually, and it is the student's responsibility to confirm receipt of the waiver by the University's deadlines noted below.

### YALE HEALTH HOSPITALIZATION/SPECIALTY COVERAGE

For a detailed explanation of this plan, which includes coverage for prescriptions, see the *Yale Health Student Handbook*, available online at https://yalehealth.yale.edu/coverage/student-coverage.

Students are automatically enrolled and charged a fee each term on their Student Financial Services bill for Yale Health Hospitalization/Specialty Coverage. Students with no break in coverage who are enrolled during both the fall and spring terms are billed each term and are covered from August 1 through July 31. For students entering Yale for the first time, readmitted students, and students returning from a leave of absence who have not been covered during their leave, Yale Health Hospitalization/Specialty Coverage begins on the day the dormitories officially open. A student who is enrolled for the fall term only is covered for services through January 31; a student enrolled for the spring term only is covered for services through July 31.

Waiving Yale Health Hospitalization/Specialty Coverage Students are permitted to waive Yale Health Hospitalization/Specialty Coverage by completing an online waiver form at https://yhpstudentwaiver.yale.edu that demonstrates proof of alternate coverage. It is the student's responsibility to report any changes in alternate insurance coverage to the Member Services Department. Students are encouraged to review their present coverage and compare its benefits to those available under Yale Health. The waiver form must be filed annually and must be received by September 15 for the full year or fall term or by January 31 for the spring term only.

**Revoking the waiver** Students who waive Yale Health Hospitalization/Specialty Coverage but later wish to be covered must complete and send a form voiding their waiver to the Member Services Department by September 15 for the full year or fall term, or by January 31 for the spring term only. Students who wish to revoke their waiver during the term may do so, provided they show proof of loss of the alternate insurance plan and enroll within thirty days of the loss of this coverage. Yale Health fees will not be prorated.

#### YALE HEALTH STUDENT DEPENDENT PLANS

A student may enroll the student's lawfully married spouse or civil union partner and/or legally dependent child(ren) under the age of twenty-six in one of three student dependent plans: Student + Spouse, Student + Child/Children, or Student Family Plan. These plans include services described in both Yale Health Basic Coverage and Yale Health Hospitalization/Specialty Coverage. Coverage is not automatic, and enrollment is by application. Applications are available from the Member Services Department or can be downloaded from the website (https://yalehealth.yale.edu/resources/forms) and must be renewed annually. Applications must be received by September 15 for full-year or fall-term coverage, or by January 31 for spring-term coverage only.

### YALE HEALTH STUDENT AFFILIATE COVERAGE

Students on leave of absence or extended study, students paying less than half tuition, students enrolled in the EMBA program, students enrolled in the PA Online program, or students enrolled in the Eli Whitney Program prior to September 2007 may enroll in Yale Health Student Affiliate Coverage, which includes services described in both Yale Health Basic and Yale Health Hospitalization/Specialty Coverage. Applications are available from the Member Services Department or can be downloaded from the website (https://yalehealth.yale.edu/resources/forms) and must be received by September 15 for full-year or fall-term coverage, or by January 31 for spring-term coverage only.

# Eligibility Changes

Withdrawal A student who withdraws from the University during the first fifteen days of the term will be refunded the fee paid for Yale Health Hospitalization/Specialty Coverage. The student will not be eligible for any Yale Health benefits, and the student's Yale Health membership will be terminated retroactive to the beginning of the term. The medical record will be reviewed, and any services rendered and/or claims paid will be billed to the student on a fee-for-service basis. Assistance with identifying and locating alternative sources of medical care may be available from the Care Management Department at Yale Health. At all other times, a student who withdraws from the University will be covered by Yale Health for thirty days following the date of withdrawal. Fees will not be prorated or refunded. Students who withdraw are not eligible to enroll in Yale Health Student Affiliate Coverage. Regardless of enrollment in Yale Health Hospitalization/ Specialty Coverage, students who withdraw will have access to services available under Yale Health Basic Coverage (including Student Health, Athletic Medicine, Mental Health & Counseling, and Care Management) during these thirty days to the extent necessary for a coordinated transition of care.

Leaves of absence Students who are granted a leave of absence are eligible to purchase Yale Health Student Affiliate Coverage for the term(s) of the leave. If the leave occurs on or *before* the first day of classes, Yale Health Hospitalization/Specialty Coverage will end retroactive to the start of the coverage period for the term. If the leave occurs anytime after the first day of classes, Yale Health Hospitalization/Specialty Coverage will end on the day the registrar is notified of the leave. In either case, students may enroll in Yale Health Student Affiliate Coverage. Students must enroll in Affiliate Coverage prior to the beginning of the term unless the registrar is notified after the first day of classes, in which case, the coverage must be purchased within thirty days of the date the registrar was notified. Fees paid for Yale Health Hospitalization/Specialty Coverage will be applied toward the cost of Affiliate Coverage. Coverage is not automatic, and enrollment forms are available at the Member Services Department or can be downloaded from the website (https://yalehealth.yale.edu/resources/forms). Fees will not be prorated or refunded.

**Extended study or reduced tuition** Students who are granted extended study status or pay less than half tuition are not eligible for Yale Health Hospitalization/Specialty Coverage. They may purchase Yale Health Student Affiliate Coverage during the term(s) of

extended study. This plan includes services described in both Yale Health Basic and Yale Health Hospitalization/Specialty Coverage. Coverage is not automatic, and enrollment forms are available at the Member Services Department or can be downloaded from the website (https://yalehealth.yale.edu/resources/forms). Students must complete an enrollment application for the plan prior to September 15 for the full year or fall term, or by January 31 for the spring term only.

For a full description of the services and benefits provided by Yale Health, please refer to the *Yale Health Student Handbook*, available from the Member Services Department, 203.432.0246, 55 Lock Street, PO Box 208237, New Haven CT 06520-8237.

# **Required Immunizations**

Proof of vaccination is a pre-entrance requirement determined by the Connecticut State Department of Public Health. Students who are not compliant with this state regulation will not be permitted to register for classes or move into the dormitories for the fall term, 2019. Please access the Incoming Student Vaccination Record form for graduate and professional students at https://yalehealth.yale.edu/new-graduate-and-professional-student-forms. Connecticut state regulation requires that this form be completed and signed, for each student, by a physician, nurse practitioner, or physician's assistant. The form must be completed, independent of any and all health insurance elections or coverage chosen. Once the form has been completed, the information must be entered into the Yale Medicat online system (available mid-June), and all supporting documents must be uploaded to http://yale.medicatconnect.com. The final deadline is August 1.

**Measles, mumps, rubella, and varicella** All students who were born after January 1, 1957, are required to provide proof of immunization against measles (rubeola), mumps, German measles (rubella), and varicella. Connecticut state regulation requires two doses of measles vaccine, two doses of mumps vaccine, two doses of rubella vaccine, and two doses of varicella vaccine. The first dose must have been given on or after January 1, 1980, *and* after the student's first birthday; the second dose must have been given at least thirty (30) days after the first dose. If dates of vaccination are not available, titer results (blood test) demonstrating immunity may be substituted for proof of vaccination. The cost for all vaccinations and/or titers rests with the student, as these vaccinations are considered to be a pre-entrance requirement by the Connecticut State Department of Public Health. Students who are not compliant with this state regulation will not be permitted to register for classes or move into the dormitories for the fall term, 2019.

**Quadrivalent meningitis** All students living in on-campus dormitory facilities must be vaccinated against meningitis. The only vaccines that will be accepted in satisfaction of the meningitis vaccination requirement are ACWY Vax, Menveo, Nimenrix, Menactra, Mencevax, and Menomune. The vaccine must have been given within five years of the first day of classes at Yale. Students who are not compliant with this state regulation will not be permitted to register for classes or move into the dormitories for the fall term, 2019. The cost for all vaccinations and/or titers rests with the student, as these vaccinations are considered to be a pre-entrance requirement by the Connecticut State Department of Public Health. Please note that the State of Connecticut does not require this vaccine for students who intend to reside off campus.

**TB screening** The University requires tuberculosis screening for all incoming students who have lived or traveled outside of the United States within the past year.

**Hepatitis B series** The University recommends that incoming students receive a series of three Hepatitis B vaccinations. Students may consult their health care provider for further information.

### HOUSING AND DINING

The Yale Housing Office has dormitory and apartment units available for graduate and professional students. Dormitories are single-occupancy and two-bedroom units of varying sizes and prices. They are located across the campus, from Edward S. Harkness Memorial Hall, serving the medical campus, to Helen Hadley Hall and the newly built 272 Elm Street, serving the central/science campus. Unfurnished apartments consisting of efficiencies and one-, two-, and three-bedroom apartments for singles and families are also available. Family housing is available in Whitehall and Esplanade Apartments. The Housing website (https://housing.yale.edu) is the venue for graduate housing information and includes dates, procedures, facility descriptions, floor plans, and rates. Applications for the new academic year are available beginning April 22 and can be submitted directly from the website with a Yale NetID.

The Yale Housing Office also manages the Off Campus Living listing service (http:// offcampusliving.yale.edu; 203.436.9756), which is the exclusive Yale service for providing off-campus rental and sales listings. This secure system allows members of the Yale community to search rental listings, review landlord/property ratings, and search for a roommate in the New Haven area. On-campus housing is limited, and members of the community should consider off-campus options. Yale University discourages the use of Craigslist and other third-party nonsecure websites for off-campus housing searches.

The Yale Housing Office is located in Helen Hadley Hall (HHH) at 420 Temple Street and is open from 9 a.m. to 4 p.m., Monday through Friday; 203.432.2167.

Yale Hospitality has tailored its services to meet the particular needs of graduate and professional school students by offering meal plan options that allow flexibility and value. For up-to-date information on all options, costs, and residential and retail dining locations, visit https://hospitality.yale.edu. Inquiries concerning food services should be addressed to Yale Hospitality, 246 Church Street, PO Box 208261, New Haven CT 06520-8261; e-mail, yale.dining@yale.edu; tel., 203.432.0420.

### **RESOURCE OFFICE ON DISABILITIES**

The Resource Office on Disabilities (ROD) facilitates accommodations for all Yale students with disabilities who register with and have appropriate medical documentation on file in the ROD. Documentation may be submitted to the ROD even though a specific accommodation request is not anticipated at the time of registration. Early planning is critical. Requests for housing accommodations must be made in the housing application. The required first step for a student with a disability is to contact the Resource Office on Disabilities to initiate the process of obtaining disability-related accommodations; see https://yale-accommodate.symplicity.com/public\_accommodation. Registration with the ROD is confidential. Generally, a student requiring academic accommodations needs to let the ROD know at the start of each term. We ask students to complete this step as soon as their schedule is known. At any time during a term, students with a newly diagnosed disability or recently sustained injury requiring accommodations should contact the ROD. More information can be found on our website, https://rod.yale.edu, including instructions for requesting or renewing accommodations. You can also reach us by phone at 203.432.2324.

### **RESOURCES ON SEXUAL MISCONDUCT**

Yale University is committed to maintaining and strengthening an educational, working, and living environment founded on civility and mutual respect. Sexual misconduct is antithetical to the standards and ideals of our community, and it is a violation of Yale policy and the disciplinary regulations of Yale College and the graduate and professional schools.

Sexual misconduct incorporates a range of behaviors including sexual assault, sexual harassment, intimate partner violence, stalking, voyeurism, and any other conduct of a sexual nature that is nonconsensual, or has the purpose or effect of threatening, intimidating, or coercing a person. Violations of Yale's Policy on Teacher-Student Consensual Relations also constitute sexual misconduct. Sexual activity requires consent, which is defined as positive, unambiguous, and voluntary agreement to engage in specific sexual activity throughout a sexual encounter.

Yale aims to eradicate sexual misconduct through education, training, clear policies, and serious consequences for violations of these policies. In addition to being subject to University disciplinary action, many forms of sexual misconduct are prohibited by Connecticut and federal law and may lead to civil liability or criminal prosecution. Yale provides a range of services, resources, and mechanisms for victims of sexual misconduct. The options for undergraduate, graduate, and professional school students are described at https://smr.yale.edu.

### SHARE: Information, Advocacy, and Support

55 Lock Street, Lower Level Office hours: 9 a.m.–5 p.m., M–F 24/7 hotline: 203.432.2000 https://sharecenter.yale.edu

SHARE, the Sexual Harassment and Assault Response and Education Center, has trained counselors available 24/7, including holidays. SHARE is available to members of the Yale community who wish to discuss any current or past experience of sexual misconduct involving themselves or someone they care about. SHARE services are confidential and can be anonymous if desired. SHARE can provide professional help with medical and health issues (including accompanying individuals to the hospital or the police), as well as ongoing counseling and support. SHARE works closely with the University-Wide Committee on Sexual Misconduct, the Title IX coordinators, the Yale Police Department, and other campus resources and can provide assistance with initiating a formal or informal complaint.

If you wish to make use of SHARE's services, you can call the SHARE number (203.432.2000) at any time for a phone consultation or to set up an in-person appointment. You may also drop in on weekdays during regular business hours. Some legal and medical options are time-sensitive, so if you have experienced an assault, we encourage you to call SHARE and/or the Yale Police as soon as possible. Counselors can talk with you over the telephone or meet you in person at Acute Care in the Yale Health Center or at the Yale New Haven Emergency Room. If it is not an acute situation and you would like to contact the SHARE staff during regular business hours, you can contact Jennifer Czincz, the director of SHARE (203.432.0310, jennifer.czincz@yale.edu), Anna Seidner (203.436.8217, anna.seidner@yale.edu), Cristy Cantu (203.432.2610, cristina. cantu@yale.edu), Freda Grant (203.436.0409, freda.grant@yale.edu), or John Criscuolo (203.645.3349, john.criscuolo@yale.edu).

### Title IX Coordinators

203.432.6854 Office hours: 9 a.m.–5 p.m., M–F https://provost.yale.edu/title-ix

Title IX of the Education Amendments of 1972 protects people from sex discrimination in educational programs and activities at institutions that receive federal financial assistance. Sex discrimination includes sexual harassment, sexual assault, and other forms of sexual misconduct. The University is committed to providing an environment free from discrimination on the basis of sex.

Yale College, the Graduate School of Arts and Sciences, and the professional schools have each designated a deputy Title IX coordinator, reporting to Stephanie Spangler, Deputy Provost for Health Affairs and Academic Integrity and the University Title IX Coordinator. Coordinators respond to and address specific complaints, provide information on and coordinate with the available resources, track and monitor incidents to identify patterns or systemic issues, deliver prevention and educational programming, and address issues relating to gender-based discrimination and sexual misconduct within their respective schools. Coordinators are knowledgeable about, and will provide information on, all options for complaint resolution, and can initiate institutional action when necessary. Discussions with a Title IX coordinator are confidential. In the case of imminent threat to an individual or the community, the coordinator may need to consult with other administrators or take action in the interest of safety. The coordinators also work closely with the SHARE Center, the University-Wide Committee on Sexual Misconduct, and the Yale Police Department.

# University-Wide Committee on Sexual Misconduct

203.432.4449 Office hours: 9 a.m.–5 p.m., M–F https://uwc.yale.edu

The University-Wide Committee on Sexual Misconduct (UWC) is an internal disciplinary board for complaints of sexual misconduct available to students, faculty, and staff across the University, as described in the committee's procedures. The UWC provides an accessible, representative, and trained body to fairly and expeditiously address formal complaints of sexual misconduct. UWC members can answer inquiries about procedures and the University definition of sexual misconduct. The UWC is comprised of faculty, administrative, and student representatives from across the University. In UWC cases, investigations are conducted by professional, independent fact finders.

## Yale Police Department

101 Ashmun Street 24/7 hotline: 203.432.4400 https://your.yale.edu/community/public-safety/police/sensitive-crimes-support

The Yale Police Department (YPD) operates 24/7 and is comprised of highly trained, professional officers. The YPD can provide information on available victims' assistance services and also has the capacity to perform full criminal investigations. If you wish to speak with Sergeant Kristina Reech, the Sensitive Crimes & Support coordinator, she can be reached at 203.432.9547 during business hours or via e-mail at kristina.reech@yale. edu. Informational sessions are available with the Sensitive Crimes & Support coordinator to discuss safety planning, available options, etc. The YPD works closely with the New Haven State's Attorney, the SHARE Center, the University's Title IX coordinators, and various other departments within the University. Talking to the YPD does not commit you to submitting evidence or pressing charges; with few exceptions, all decisions about how to proceed are up to you.

# Life in New Haven

New Haven has a town's scale, with low buildings, tree-lined streets, and pockets of stores and restaurants to serve local residents. It also has the resources and conveniences of a city, with a downtown of office buildings, courthouses, and hotels, many of which surround the central Green that adjoins Yale's Old Campus.

The downtown area is small and inviting, easily traversed by foot. Bordering the Yale campus are cafes, bookstores, clothing boutiques, art supply stores, and a variety of small retail shops. Restaurants surround the campus, allowing students to walk from Paul Rudolph Hall and sample the best of American, Chinese, Cuban, Eritrean, Ethiopian, French, Greek, Indian, Irish, Italian, Jamaican, Japanese, Korean, Malaysian, Mexican, Middle Eastern, Nuevo Latino, Spanish, Swedish, Thai, Turkish, and Vietnamese cuisine.

New Haven enjoys outstanding cultural attractions for a city of its size. In addition to Yale's own concerts and recitals, the New Haven Symphony Orchestra and New Haven Chorale also perform regularly at Woolsey Hall. The Yale Repertory Theatre, on campus, and Long Wharf Theatre, nearby, are two of the leading repertory theaters in the country. The Shubert Performing Arts Center just off campus brings in touring companies and nationally known performers. In addition to the lively theater and concert venues on and off campus, popular, folk, and rock artists also perform regularly at the New Haven Green, Toad's Place, and other jazz and dance clubs.

Most students of the School of Architecture live within short walking distance of Paul Rudolph Hall, in neighborhoods that retain the flavor of the many different religious and ethnic groups that followed the Puritan settlers into the city. Neighborhood festivals punctuate the year, such as the Cherry Blossom Festival and the Santa Maria Maddalena Festival in Wooster Square, a traditionally Italian neighborhood famous for its restaurants; the largest St. Patrick's Day celebration between New York and Boston; and the Fiestas de Loiza, a celebration of Afro-Puerto Rican culture in the Fair Haven district. In June, the annual International Festival of Arts and Ideas brings over 100,000 people to the downtown area for events and performances by artists representing more than two dozen cultures.

New Haven is ringed by parks, including East Rock and West Rock parks. There are many public tennis courts and eight golf courses within the area, including Yale's own golf course, considered to be one of the best collegiate courses in the world. There are nearby skating and skiing facilities.

New Haven is one of the major stops on the Amtrak high-speed Acela and regular train service between Washington, D.C., and Boston. Metro-North also provides frequent train service between Manhattan and New Haven. By train, New Haven is approximately ninety minutes from New York City and two and one-half hours from Boston, depending upon the service selected.

New Haven is directly served by American Airlines at Tweed-New Haven Airport with taxi service to New Haven. Frequent limousine bus service to New Haven is also available from the major airports of Bradley (Hartford, Connecticut), Kennedy and LaGuardia (New York City), and Newark (New Jersey).

Additional information about New Haven is available online at http://livingnh.yale. edu and www.newhavenct.gov.

# Endowment and Term Funds

## ENDOWMENT FUNDS

The School of Architecture has the following endowed funds. The date of the gift and the name of the donor are given in each instance.

*Frederick T. Ahlson Scholarship Fund* (2004) Established by a bequest of Frederick T. Ahlson (B.F.A. 1930) for financial support of students in the School of Architecture.

*Moulton Andrus Award Fund* (1984) Established by family members as a memorial to Moulton Andrus (B.A. 1962, M.Arch. 1966) for an annual award to a graduating student who has achieved excellence in art and architecture.

*Architect Fellowship Fund* (1982) Established by numerous donors for general fellowship support.

*Architectural Teaching Fund* (1909) Established by a gift of Henry Fowler English (LL.B. 1874) and John Davenport Wheeler (Ph.B. 1858) to create an endowment to support faculty and teaching in the profession of architecture.

*Architecture Alumni Fund Endowment* (2003) Established within the School of Architecture to represent all the unrestricted endowment gifts made to the School of Architecture Alumni Fund over many years, the income from which is to be used for the general support of the School.

*Architecture Alumni Fund Scholarship* (2003) Established within the School of Architecture to represent all the gifts for financial aid made to the School of Architecture Alumni Fund endowment over many years, the income from which is to be used for general student scholarship support.

*Architecture Building Maintenance Fund* (1963) Established by the Helen and Thomas Hastings Fund to support the maintenance of the Art & Architecture Building, renamed Paul Rudolph Hall in 2008.

Architecture Endowed Dean's Resource Fund (2005) Established by various donors to provide income to be used at the discretion of the dean for the general support of the School of Architecture.

*Arcus Scholarship Fund* (2010) Established by Jon Stryker to support student scholarships in the School of Architecture.

*Diana Balmori Professorship* (2018) Established by Cesar Pelli, dean of the School of Architecture from 1977 until 1984, in memory of landscape architect Diana Balmori, who was a longtime faculty member at the Yale School of Architecture in addition to her robust landscape architecture practice, to support a professorship in the field of landscape.

*The Edward P. Bass Distinguished Visiting Architecture Fellowship Fund* (2004) Established by Edward P. Bass (B.S. 1968, Arch. 1972) to bring distinguished private and public sector development leaders to the School on a regular basis as visiting Fellows who participate

in advanced studios and seminars as a way to give students insight into the real-world development process and the role the architect plays as part of a development team.

*Edward P. Bass Fellows in Architecture Fund* (2015) Established by Edward P. Bass (B.S. 1968, Arch. 1972) to support a graduate student exchange program between the School of Architecture and the University of Cambridge Department of Architecture.

*Edward P. Bass Rome Seminar Fund* (2016) Established by Edward P. Bass (B.S. 1968, Arch. 1972) to designate and support the Robert A.M. Stern Rome summer drawing seminar or similar programs of the School in the future. The seminar is named in honor of Robert A.M. Stern (M.Arch. 1965), dean of the School of Architecture from 1998 until 2016.

*Myriam Bellazoug Memorial Fund* (1999) Established in honor of Myriam Bellazoug (M.Arch. 1991) to support lectures and symposia held in conjunction with the publication of the most recent issue of *Perspecta, The Yale Architectural Journal*. Ms. Bellazoug was editing what was to be *Perspecta 30* when she died in the mysterious crash of TWA Flight 800 on July 17, 1995. She was flying to Paris as part of her work in the New York office of the architect Peter Marino, who, together with friends of Ms. Bellazoug, established this fund. The following persons have delivered a Myriam Bellazoug Memorial Lecture:

Mark Wigley, Spring 2000 Herman Spiegel, Fall 2000 Sandy Isenstadt, Fall 2001 K. Michael Hays, Spring 2002 Kenneth Frampton, Fall 2003 Felicity Scott, Fall 2004 Neil Denari, Fall 2005 Sam Jacob, Spring 2006 Tom Wiscombe, Fall 2006 Reinhold Martin, Fall 2007 Yoshiharu Tsukamoto, Spring 2008 Matthew Coolidge, Fall 2008 Armin Linke, Spring 2010 Thomas de Monchaux, Spring 2011 Adrian Benepe, Spring 2012 Preston Scott Cohen, Timur Galen, and Nader Tehrani, Fall 2013 Sean Keller, Spring 2014 Gregg Pasquarelli, Fall 2014 Saskia Sassen, Fall 2015 Sergio Muñoz Sarmiento, Fall 2016 V. Mitch McEwen, Fall 2017 Francesco Casetti, Fall 2018

*William Henry Bishop Fund* (1929) Established by a bequest of William Henry Bishop (B.A. 1867) to support a professorship in architecture.

*Frederick Bland Scholarship Fund* (2018) Established by Frederick Bland (B.A. 1968, M.Arch. 1972) to support student scholarships in the School of Architecture.

*Wendy Elizabeth Blanning Fund* (1976) Established by friends and family as a memorial to Wendy Elizabeth Blanning, class of 1978. The fund supports the awarding of a prize to a second-year student in the School of Architecture who has shown the most promise of development in the profession.

*Kent Bloomer Scholarship Fund* (2019) Established by Robert "Buzz" Yudell (B.A. 1969, M.Arch. 1973), Christine "Tina" Beebe (M.F.A. 1974), Stephen W. Harby (B.A. 1976, M.Arch. 1980), and friends in honor of Kent Bloomer (M.F.A. 1959), longtime faculty member, to endow a scholarship fund for the benefit of one or more deserving students.

*John A. Carrafiell Scholarship Fund* (2009) Established by John A. Carrafiell (B.A. 1987) to support student scholarships in the School of Architecture, with preference for students interested in urbanism.

*John A. Carrafiell Teaching Fund* (2009) Established by John A. Carrafiell (B.A. 1987) to support teaching and research associated with courses taught at the School of Architecture, with preference for course work in the areas of study of urbanism and professional practice.

*Centerbrook Architects Fund for the Study of Craft* (2010) Established by Jefferson B. Riley (M.Arch. 1972), Mark Simon (M.Arch. 1972), Chad Floyd (B.A. 1966, M.Arch. 1973), and James C. Childress to provide support to train Yale graduate students of architecture to make things by hand, especially those where the hand of the craftsman is evidenced.

*William G. (Arch. 1930) and Virginia Field Chester Scholarship Fund* (2009) Established by the Trust of William G. Chester (M.Arch. 1930) and Virginia Field Chester to support student scholarships in the School of Architecture.

*Austin Church III Family Fund for* Perspecta (2004) Established by Austin Church III (B.A. 1960) to support the publication of *Perspecta, The Yale Architectural Journal.* 

*The Clarke Family Scholarship Fund* (2006) Established by Fred W. Clarke III and Laura Weir Clarke to support student scholarships in the School of Architecture.

*Richard D. Cohen Scholarship Fund* (2007) Established by Richard D. Cohen to support student scholarships in the School of Architecture.

*Robert Leon Coombs Scholarship Fund* (2002) Established by a bequest of Robert Leon Coombs (M.Arch. 1971) to endow a scholarship in recognition of outstanding architectural ability.

*William B. and Charlotte Shepherd Davenport Fund* (1943) Established by Professor Shepherd Stevens (B.F.A. 1922, M.A. Hon. 1930) as a memorial to the donor's aunt and uncle for an endowment of a professorship in Architecture.

*Dean's Scholarship Fund* (2017) Initiated by Dean Deborah Berke with gifts from various Dean's Council members, alumni, and friends of the School to provide financial aid and/ or merit scholarships for deserving students at the School of Architecture.

*Robert W. DeForest Fund* (1927) Established by Robert Weeks DeForest (B.A. 1870) to support the general purposes of the School.

*Dilworth Family Scholarship Fund* (2007) Established by Charles D. Dilworth (B.A. 1979, M.Arch. 1983) to support student scholarships in the School of Architecture.

*Peter H. Dominick, Jr. Fellowship Fund for Travel* (2009) Established by The Fourth Century Trust and the gifts of various friends, colleagues, and family in memory of Peter H. Dominick, Jr. (B.A. 1963), to support travel for undergraduate and/or graduate students and faculty traveling together to locations related to areas of study within the School of Architecture, and/or to support independent travel by one or more students in the Ph.D. program within the School of Architecture, and/or one or more advanced master's degree students within the School of Architecture.

*Caroline E. Dudley Fund* (1935) Established as a bequest by Caroline E. Dudley to support the general purposes of the School.

*Enid Storm Dwyer Scholarship in Architecture Fund* (1994) Established by Enid Storm Dwyer to endow a scholarship in recognition of a student who demonstrates outstanding professional promise.

*Beatrix Farrand Fund* (2019) Established by anonymous bequest in memory of Beatrix Farrand, Yale University's landscape architect from 1922 to 1945, to support teaching and research in the field of landscape architecture.

*H.I. Feldman Prize Fund* (1955) Established by Hyman I. Feldman (B.F.A. 1920) for a prize to be awarded annually for the best solution of an architectural problem, taking into consideration the practical, functional, and aesthetic requirements of that problem. Since 1981, the following students have been awarded the H.I. Feldman Prize:

Brian Edward Healy, 1981 Charles F. Lowrey, Jr., 1982 Stefan Ragnar Hastrup, 1983 Jun Mitsui, 1984 Herbert Martin Hodgman, 1985 David DuShane Harland, Jr., 1986 Douglas A. Garofalo and Madeleine Sanchez, 1987 Gilbert Pierson Schafer III, 1988 Steve Lawrence Dumez, 1989 Carrie M. Burke, 1990 Douglas Neal Kozel, 1991 Norberto Abel Bressano, 1992 Michael A. Harshman, 1993 Michael R. Haverland, 1994 Ira Thomas Zook III, 1995 Russell Starr Katz and Rosemary Welle, 1996 Gregory Joseph Goebel, 1997 Kevin P. Owens, 1998 Kok Kian Goh, 1999 Mark Foster Gage, 2000 David Mabbott, 2001

John M. Nafziger and Sarah Elizabeth Strauss, 2002 Marshall A. Bell, 2003 Christopher Allen Marcinkoski and Andrew Thomas Moddrell, 2004 Ralph Colt Bagley IV and Jonah C. Gamblin, 2005 Russell Jon Greenberg, 2006 Dana L. Getman, 2007 Dylan M. Sauer, 2008 Emily Arden Wells, 2009 Anne-Marie Paula Armstrong, 2010 Daniel Gregory Markiewicz and Ryan Welch, 2011 Amir Mikhaeil, 2012 Christina Argyrou, 2013 Bryan Andrew Maddock, 2014 Kara Marie Biczykowski, 2015 Luke Alan Anderson, 2016 Istvan van Vianen and Minquan Wang, 2017 Jack Lipson, 2018 Ryan Thomas Hughes, 2019

*Samuel J. Fogelson Memorial Fund* (1979) Established by Richard C. Fogelson (B.Arch. 1965) in memory of his father to support scholarship aid.

*Mary C. Fosburgh Fund* (2003) Established by the bequest of Mary C. Fosburgh to provide general support of activities of the School.

Lord Norman R. Foster Scholarship Fund (2009) Established by the Hearst Corporation in honor of Norman R. Foster (M.Arch. 1962, D.F.A.H. 2003), architect of the Hearst Tower in New York City, selected to receive the 2008 International Highrise Award by the City of Frankfurt, Germany, and DekaBank, to encourage one or more students who might otherwise not be able to attend the Yale School of Architecture.

Lord Norman R. Foster '62 M.Arch., '03 D.F.A.H. Visiting Professorship in Architecture (2009) Established by Norman Foster to fund a visiting professorship in architecture, with preference for international visiting faculty.

*Frank Gehry Scholarship Fund* (2018) Established by Richard D. Cohen in honor of architect Frank Gehry, who has been a visiting professor at the Yale School of Architecture throughout his career, to support fellowships in each incoming class for the duration of their studies.

Harvey Geiger Fund for Undergraduate Travel and Research in Architecture (2013) Established by Harvey R. Geiger (B.A. 1964, M.C.P. 1969, M.Arch. 1969) to support travel and research for undergraduates majoring in Architecture.

*General Architecture Fund* (1976 and 1978) Established by various donors to provide unrestricted funds for the general support of the School of Architecture.

*Brendan Gill Lectureship Fund* (1987) Established by Herbert P. McLaughlin (B.A. 1956, M.Arch. 1958) to honor the writer and critic Brendan Gill (B.A. 1936). The following persons have delivered a Brendan Gill Lecture:

Brendan Gill, Spring 1988 Neil Levine, Spring 1990 Dolores Hayden, Fall 1990 Charles Moore, Fall 1991 Morris Lapidus, Spring 1993 David Hickey, Spring 1995 Ken Silver, Spring 1995 Allucquere Rosanne Stone, Fall 1997 Terence Riley, Spring 1999 Kenneth Frampton, Spring 2000 Hugh Hardy, Spring 2000 Charles Jencks, Fall 2000 Peter Corrigan, Spring 2001 Phyllis Lambert, Spring 2002 Roger Kimball, Fall 2002 Roger Connah, Spring 2003 Edward Casey, Fall 2003 Robert Bruegmann, Spring 2004 Jean-Louis Cohen, Fall 2004 Hal Foster, Spring 2005 Esther de Costa Meyer, Fall 2005 Wendy Steiner, Spring 2006 Jeffrey Kipnis, Fall 2006 Pier Vittorio Aureli, Fall 2007 David Brownlee, Spring 2008 Robert Campbell, Fall 2008 Nicholas Fox Weber, Spring 2009 Glenn Adamson, Fall 2009 Nasser Rabbat, Spring 2011 Kenneth Frampton, Fall 2011 Joel Kotkin, Fall 2011 Mary Ann Caws, Jean-Louis Cohen, Beatriz Colomina, Peter Eisenman, Mark Jarzombek, and Kevin Repp, Fall 2012 Sylvia Lavin, Fall 2013 Paola Antonelli, Charles Jencks, Greg Lynn, Frédéric Migayrou, Alejandro Zaera-Polo, Spring 2014 Justin McGuirk, Fall 2014 Peter Sloterdijk, Fall 2015 Anthony Vidler, Spring 2016 Łukasz Stanek, Fall 2016 Blair Kamin, Fall 2017 Christopher Hawthorne, Fall 2018

*Alexander Gorlin Scholarship Fund* (2006) Established by Alexander Gorlin (M.Arch. 1980) Architects to support student scholarships in the School of Architecture.

*James Wilder Green Dean's Resource Fund* (2006) Established by the estate of James Wilder Green (B.Arch. 1952) to support the School of Architecture's exhibitions and other external initiatives.

*Franklin U. Gregory Memorial Fund* (1948) Established by Edna Gregory Crawford as a memorial to her brother, Franklin U. Gregory (B.A. 1891), to support scholarship aid.

*Charles Gwathmey Professorship in Practice* (2009) Established by Ralph and Ricky Lauren in memory of Charles Gwathmey (M.Arch. 1962), to honor Charles's design achievements and to acknowledge the contributions that Charles made as an architect as well as an educator with unique abilities to motivate young people, this professorship supports teaching, research, and travel for distinguished senior design faculty at the School of Architecture.

*Charles Gwathmey Scholarship Fund* (2006) Established by Bette-Ann and Charles Gwathmey (M.Arch. 1962) to support student scholarships in the School of Architecture.

*William Randolph Hearst Endowed Fund at the Yale School of Architecture* (2009) Established by the William Randolph Hearst Foundation to support teaching and study of manual drawing at the School of Architecture.

*Richard Hellmann Architectural Fund* (1973) Established by the Richard Hellmann Foundation to support educational opportunities in the School.

*Hilder Family Scholarship Fund* (2005) Established by David B. Hilder to support scholarship aid for a student at the School.

The Hines Endowed Fund for Advanced Sustainability in Architectural Design (2008) Established by Gerald D. Hines to promote research and teaching that focus on the attempt to minimize, mitigate, and avoid adverse impacts on the natural environment and human health, while also enhancing beneficial contact between people and natural systems and processes in the built environment.

*J.M. Hoppin Professorship of Architecture Fund* (1923) Established by a bequest of James Mason Hoppin (B.A. 1840) to support a professorship in architecture.

*Kenneth A. Housholder Memorial Scholarship Fund* (2006) Established by the estate of Kenneth A. Housholder (B.Arch. 1947) to support student scholarships in the School of Architecture.

*Kenneth A. Housholder Scholarship Fund* (1982) Established by a gift of Kenneth A. Housholder (B.Arch. 1947) to create a scholarship in the School of Architecture.

*Judith and Walter Hunt Fund in Architecture* (2007) Established by Walter A. Hunt, Jr. (B.A. 1963, M.Arch. 1967) to support joint faculty and student travel related to areas of study at the School of Architecture.

*Frank D. Israel Scholarship Fund* (2008) Initiated by Frank O. Gehry (D.F.A. Hon. 2000), classmates, and friends in memory of Frank D. Israel (Arch. 1970) to support student scholarships in the School of Architecture.

*Elise Jaffe* + *Jeffrey Brown Endowed Fund for the Study of Contemporary Architecture* (2007) Established by Elise Jaffe and Jeffrey Brown to support faculty and student research and related travel, and to disseminate the faculty and student findings, through publications, lectures, exhibitions, symposia, etc., with preference for the study of twentieth-century architecture.

*Louis I. Kahn Visiting Assistant Professorship Fund* (2003) Established in honor of Louis I. Kahn by an anonymous donor to fund a junior visiting professorship in design. First awarded in 2003.

*Louis I. Kahn Visiting Professorship Fund* (1980) Established by friends and colleagues of Louis I. Kahn to endow a visiting professorship in architecture. First awarded in 1999.

*Austin Kelly Scholarship Fund* (2018) Established by Judith McBrien and friends in memory of Austin Kelly (M.Arch. 1993) to support student scholarships.

*The Kibel Foundation Fund* (2001) Established by the Kibel Foundation at the direction of Henry Kibel (M.Arch. 1947) to provide support for the School of Architecture's exhibition and publication program.

*Tai Soo Kim First-Year Building Project Fellowship Fund* (2005) Established by Tai Soo Kim (M.Arch. 1962) to provide one or more fellowships for students enrolled at the Yale School of Architecture selected as First-Year Building Project summer interns working over the summer to complete the Building Project.

*Fred Koetter Exhibitions Fund* (2016) Established by Robert A.M. Stern (M.Arch. 1965), dean of the School of Architecture from 1998 until 2016, in honor of Fred Koetter, dean of the School of Architecture from 1993 until 1998.

*Fred Koetter and Susie Kim Endowed Fund* (2007) Established by Fred Koetter, dean of the School of Architecture from 1993 until 1998, and Susie Kim to support travel expenses for the Post-Professional Studio at the Yale School of Architecture.

*Kenneth S. Kuchin Scholarship Fund* (2010) Established by Kenneth S. Kuchin to support student scholarships in the School of Architecture.

*Edward R. Lambert Fund* (1929) Established as a bequest of Edward R. Lambert (Ph.B. 1910, Cert.Eng. 1912) to be used for the encouragement of architecture as a fine art.

*Faith Lasser Memorial Scholarship Fund* (2009) Established by David M. Schwarz (M.Arch. 1974), and the gifts of family and friends, in memory of David's mother, Faith Lasser, to support student scholarships in the School of Architecture.

Lois Alm Lenahan Memorial Dean's Resource Fund (2007) Established by a gift of Lois Lenahan, as directed by her daughters, Elizabeth Lenahan, K. C. Perkins, and Nancy Gourley, to provide support for the study of landscape architecture at the School of Architecture. *Timothy Egan Lenahan Memorial Fund* (1994) Established by friends and family of Timothy Egan Lenahan (B.A. 1980, M.Arch. 1984) to support an annual lecture focusing on the relationship between landscape and architecture and to support the teaching of landscape. The following persons have delivered a Timothy Egan Lenahan Memorial Lecture:

Richard Haag, Spring 1996 James Corner, Fall 1997 Michael Sorkin, Spring 1999 Witold Rybczynski, Fall 1999 Mario Schjetnan, Spring 2000 Kathryn Gustafson, Fall 2000 Michael Van Valkenburgh, Spring 2001 Stan Allen and James Corner, Spring 2002 Peter Walker, Spring 2003 Alessandra Ponte, Spring 2004 Morgan Dix Wheelock, Spring 2005 Mirka Benes, Spring 2006 Adriaan Geuze, Spring 2007 Kate Orff, Fall 2007 Walter Hood, Fall 2008 Elizabeth Meyer, Spring 2010 Kristina Hill, Spring 2011 Charles Waldheim, Spring 2012 Thaisa Way, Spring 2013 Anette Freytag, Spring 2014 Eelco Hooftman, Spring 2015 Stig Andersson, Spring 2016 Mikyoung Kim, Spring 2017 Luis Callejais, Spring 2018 Sou Fujimoto, Spring 2019

*Yen and Dolly Liang Scholarship Fund* (2002) Established at the bequest of Dolly Liang in memory of herself and her husband, Yen Liang (B.F.A. 1931), an architect and writer of children's books. This fund supports student scholarships in the School of Architecture.

*Lin Art/Architecture Scholarship Fund* (2011) Established by Maya Y. Lin (B.A. 1981, M.Arch. 1986, D.F.A.H. 1987) to support student scholarships in the School of Architecture.

*Raymond Liston Scholarship Fund* (2019) Established as a bequest of Raymond Liston (M.Arch. 1960) to support student scholarships.

*William E. and Gertrude B. Lowry Class of 1947 Scholarship Fund* (2016) Established by the bequest of Gertrude B. Lowry, widow of William E. Lowry (B.A. 1947, M.Arch. 1950), to support student scholarships in the School of Architecture.

Anne Kriken Mann Hand Drawing Fund (2014) Established by Anne Kriken Mann to support instruction in hand drawing in the School of Architecture.

*Anne Kriken Mann Scholarship Fund* (2016) Established by Anne Kriken Mann to support student scholarships in the School of Architecture.

*Elisabeth Nan Martin and Michael Coleman Duddy School of Architecture Scholarship Fund* (2015) Established by Elisabeth Nan Martin (M.Arch. 1983) and Michael Coleman Duddy (M.Arch. 1985) to support student scholarships in the School of Architecture.

*Charles O. Matcham Scholarship Fund* (1954) Established by Charles O. Matcham (B.A. 1925) to honor Charles A. and Margaret O. Matcham, his father and mother. This fund supports a scholarship for a last-year student who is known to be in need of financial support and who has shown in previous years to have outstanding qualities meriting such support.

*Ann and Gilbert Maurer Scholarship Fund* (2016) Established by Ann and Gilbert Maurer to support student scholarships in the School of Architecture.

*Carroll L.V. Meeks Memorial Scholarship Fund* (1968) Established by associates, friends, and former students of History of Architecture Professor Carroll L.V. Meeks (B.A. 1928, B.F.A. in architecture 1931, M.A. 1934) to award scholarship funds to students in the School of Architecture.

*Everett Victor Meeks Graduate Fellowship Fund* (1956) Established by various donors as a memorial to Everett Victor Meeks (B.A. 1901, B.F.A. 1917, M.A. Hon. 1919), former dean of the School of the Fine Arts, to award fellowships.

*J. Irwin Miller Endowment* (2010) Established by William I. Miller (B.A. 1978), Catherine G. Miller, Elizabeth G. Miller, and Margaret I. Miller (M.A. 1968) in memory of their father, J. Irwin Miller (B.A. 1931), to support an annual J. Irwin Miller Symposium in the School of Architecture.

*Charles W. Moore Building Program Fund* (1995) Established by Centerbrook Architects, various friends, and colleagues of Charles W. Moore, former dean of the School, to provide summer income for student interns working on the School's First-Year Building Project.

*Russell P. Morse Scholarship Fund* (2017) Established by Russell P. Morse (B.F.A. 1940) to support worthy and needy students in the School of Architecture.

*David C. Morton II Scholarship Fund* (2004) Established by Anne Morton Kimberly in memory of her son, David C. Morton II (B.A. 1963, M.Arch. 1968) to support financial aid for students at the School of Architecture.

*A. Whitney Murphy Scholarship Fund* (1992) Established as a bequest of A. Whitney Murphy (B.A. 1938, B.F.A. in architecture 1941) to assist a needy student in the final year at the School of Architecture.

*George Nelson Scholarship Fund* (1988) Established in honor of George Nelson (B.A. 1928, B.F.A. in architecture 1931), architect, product designer, and writer, by Herman Miller, Inc., and Mrs. George Nelson to award each year scholarships to second-year graduate students of architecture for support for an independent course of study. The following students have been awarded the George Nelson Scholarship:

William Vahan Fereshetian, 1989 Erika Gabrielle Belsey, 1990 Maitland Jones III, 1991 Scott John Specht, 1992 Sergey Olhovsky, 1993 Andrew Jesse McCune, 1994 Courtney Elizabeth Miller, 1995 Bertha A. Olmos, 1996 Emily Sheya Kovner, 1997 Bruce David Kinlin, 1998 Samer M. Bitar, 1999 Paul Arougheti, 2000 Noah K. Biklen, 2001 Andrew F. Davis and Francine Hsu (joint project), 2002 Christopher Harrison Cayten, 2003 Ralph Colt Bagley IV, 2004 Michele Naomi Darling, 2005 Brook Giles Denison, 2006 Garret James Gantner, 2007 John C. Brough, 2008 Parsa Khalili, 2008 Aidan Doyle, 2009 Palmyra Geraki, 2009 Marija Brdarski, 2010 Emmett Zeifman, 2010 Can Vu Bui, 2011 Thomas Matthew Rolles Fryer, 2011 Gary Leggett, 2012 Ivan Farr, 2013 John Blakely Wolfe, 2014 Andrew John Sternad, 2015 Cathryn Garcia-Menocal, 2016 Ian Cameron Donaldson, 2017 Miguel Sanchez-Enkerlin, 2018 Melissa Kendall Weigel, 2018 Gioia Connell, 2019

*New Practice Paradigms Lectureship Fund* (2007) Established by Phillip G. Bernstein (B.A. 1979, M.Arch. 1983) and Nancy Alexander (B.A. 1979, M.B.A. 1984) to support teaching and research in practice innovation within the School of Architecture, with particular focus on the leadership role of the architect in the building process.

*Ng Chi Sing Scholarship Fund* (2012) Established by Louis Ng, parent of Rafael Ng (M.Arch. 2013), to support student scholarships in the School of Architecture, with first preference for students from Hong Kong and Macau, and second preference for students from Asia.

*John Henry Niemeyer Fund* (1942) Established as a bequest of John Henry Niemeyer (M.A. Hon. 1874) to be used to promote the interests and educational facilities of the School.

*Bradley Nitkin Scholarship Fund* (2017) Established by Helen Nitkin in memory of Bradley Nitkin (B.A. 1969) to provide financial aid for students at the School of Architecture.

*The Nitkin Family Dean's Discretionary Fund in Architecture* (2004) Established by Bradley Nitkin (B.A. 1969) to provide support to a dean's discretionary fund.

*William Edward Parsons Memorial Medal* (1941) Established by Myra Louise Parsons as a memorial to her husband, William Edward Parsons (B.A. 1895, B.F.A. 1905), designer, architect, and city planner who, at the end of his career, established a program in city planning at the School. This fund provides a medal to a member of the graduating class who has shown the greatest excellence in group or city planning.

*Cesar Pelli Scholarship Fund* (2005) Established by Cesar Pelli, dean of the School of Architecture from 1977 until 1984, to provide financial assistance to students at the Yale School of Architecture.

*Donald I. Perry Book Fund in the Yale School of Architecture* (2008) Established by the bequest of Donald I. Perry (B.Arch. 1953) for acquisitions at the Yale School of Architecture.

Perspecta *Gift Fund* (2000) Established by various donors to support the publication expenses for *Perspecta: The Yale Architectural Journal*.

*Henry A. Pfisterer Scholarship Fund* (1984) Established by friends to honor Henry A. Pfisterer, a professor of architectural engineering from 1941 until his death in 1972 and acting chairman in 1957.

*Pickard Chilton Dean's Resource Fund* (2011) Established by Jon Pickard (M.Arch. 1979) and William D. Chilton, founding partners of the architectural firm Pickard Chilton, to support the priorities of the School of Architecture, with a preference for the fabrication and installation of exhibitions.

*Pickard Chilton Fellowship Fund* (2006) Established by Jon Pickard (M.Arch. 1979) and William D. Chilton, founding partners of the architectural firm Pickard Chilton, to support student scholarships in the School of Architecture.

*Alexander Purves Fund* (2005) Initiated by Steven Harris, Deborah Berke, and friends to honor and recognize Professor Emeritus Alexander Purves (B.A. 1958, M.Arch. 1965) for his dedication and outstanding years of teaching undergraduate architecture majors. This fund provides support for the undergraduate major at the School of Architecture.

*Henry Hart Rice Fund for Urban Studies at Yale* (2011) Established by a gift from the Rice Family Foundation to support a permanent faculty position of leadership for Yale University's urban studies initiative.

*Henry Hart Rice Fund in Architecture* (1999) Established by a gift from the Rice Family Foundation to support degree-related travel at the School of Architecture.

*Carol Ann Rinehart Scholarship Fund* (2014) Established by the bequest of Carol Ann Rinehart to support student scholarships in the School of Architecture for students who best exemplify courage and high moral purpose, and who demonstrate promise in their chosen field.

*Monica C. Robinson Scholarship Fund* (2018) Established in honor of Monica C. Robinson by family, friends, and colleagues to support student scholarships.

*James Gamble Rogers Memorial Fellowship Fund* (1990) Established by James G. Rogers (B.A. 1931) to honor his father, James Gamble Rogers (B.A. 1889), to award fellowships to second-year students in the first professional degree program on financial aid who have demonstrated skill as designers and interest in critical thought.

*Daniel Rose (1951) Visiting Assistant Professorship* (2007) Established by Joseph B. Rose (B.A. 1981) and Gideon G. Rose (B.A. 1985) to honor their father, Daniel Rose, to fund a visiting assistant professorship in urban and environmental studies.

*The David W. Roth and Robert H. Symonds Memorial Lecture Fund* (2000) Established as a gift of W. Mason Smith III (M.Arch. 1965) to honor his classmates David W. Roth and Robert H. Symonds. This fund supports a lecture plus a day in small-group meetings that expose Yale students to disciplines other than architecture, thereby reinforcing the broad goals of the profession. The following persons have delivered a David W. Roth and Robert H. Symonds Memorial Lecture:

Richard Sennett, Fall 2000 Richard Swett, Spring 2002 Arjun Appadurai, Spring 2003 Richard Kuhns, Fall 2003 Setha Low, Spring 2005 Steven Johnson, Spring 2006 Mark Gottdiener, Spring 2007 Adrian Favell, Spring 2008 Loïc Wacquant, Spring 2009 Saskia Sassen, Spring 2010 Thomas Y. Levin, Spring 2011 Neil Smith, Spring 2012 Sven-Olov Wallenstein, Spring 2013 Trevor Paglen, Spring 2014 Douglas Rushkoff, Spring 2015 Elizabeth Danze, Fall 2015 Elaine Scarry, Fall 2016 Karsten Harries, Spring 2017 Liam Young, Spring 2018 Ananya Roy, Spring 2019

Marshall Ruben and Carolyn Greenspan First-Year Building Project Fellowship Fund (2007) Established by Marshall S. Ruben (B.A. 1982) and Carolyn B. Greenspan to provide fellowships to student summer interns working on the School's First-Year Building Project. *Marshall Ruben and Carolyn Greenspan Scholarship Fund* (2016) Established by Marshall Ruben (B.A. 1982) and Carolyn Greenspan to support student scholarships in the School of Architecture.

Paul Rudolph Lectureship Fund (1986) Established by Claire and Maurits Edersheim to create an annual lectureship to honor Paul Rudolph (M.A. Hon. 1958), former chairman of the Department of Architecture of the School of Art and Architecture and designer of three buildings at Yale, including the Art & Architecture Building (1963), renamed Paul Rudolph Hall in 2008. The following persons have delivered a Paul Rudolph Lecture: Paul Rudolph, 1987 Robert A.M. Stern, 1988 Michael McKinnell, 1989 Charles Gwathmey, 1990 Philip Johnson, 1991 Alison and Peter Smithson, 1992 Colin Rowe, 1994 Carlos Jimenez and Mark Mack, 1995 John Hejduk, 1997 Bernard Tschumi, Spring 1999 Patricia Patkau, Fall 1999 Tod Williams and Billie Tsien, Spring 2000 Marion Weiss and Michael Manfredi, Fall 2000 Shigeru Ban, Spring 2001 Will Bruder, Spring 2002 Bernard Tschumi, Spring 2003 Moshe Safdie, Fall 2003 David Childs, Spring 2004 Thom Mayne, Fall 2004 Vincent Scully, Spring 2005 Massimiliano Fuksas, Fall 2005 Tony Fretton, Spring 2006 Kazuyo Sejima, Fall 2006 Paul Andreu, Spring 2008 Adrian Forty, Spring 2009 Robert Venturi and Denise Scott Brown, Spring 2010 Robert Maxwell, Fall 2010 Stanley Tigerman, Fall 2011 François Roche, Spring 2012 Brigitte Shim, Fall 2012 Wang Shu, Spring 2013 Philippe Rahm, Fall 2013 Jeanne Gang, Spring 2015 Hashim Sarkis, Fall 2015 Francine Houben, Spring 2016 Allison Williams, Fall 2016 Róisín Heneghan and Shih-Fu Peng, Spring 2018 Julie Snow, Fall 2018

*Paul Rudolph Publication Fund* (2000) Established by Claire and Maurits Edersheim in honor of Paul Rudolph (M.A. Hon. 1958) to support the School's ability to inform a broader audience through print and electronic media.

*Ruesch Family Scholarship Fund* (2006) Established by Jeanne Ruesch to support student scholarships in the School of Architecture.

*Harvey R. Russell Architecture Scholarship Fund* (2002) Established by Katherine Hauschild in the memory of Harvey R. Russell (B.A. 1934, M.S. 1936) and that of Katherine Hauschild. This fund supports student scholarships in the School of Architecture.

*Eero Saarinen Memorial Scholarship Fund* (1962) Established by classmates, business associates, and friends of Eero Saarinen (B.Arch. 1934, M.A. Hon. 1949) to fund scholarship awards to students in the School of Architecture.

*Eero Saarinen Visiting Professorship Fund* (1982) Established by Kevin Roche, colleagues, and friends of Eero Saarinen (B.Arch. 1934, M.A. Hon. 1949) to support a visiting professorship in architecture and to support lectures by architects and other individuals to broaden professional education about issues within the manmade environment. The following persons have delivered an Eero Saarinen Lecture:

Anthony A. Williams, Fall 2000 Thomas Krens, Spring 2002 Joseph Rose, Fall 2002 Daniel Doctoroff, Spring 2004 Stephen Wolfram, Spring 2005 Amanda Burden, Spring 2006 Susan Fainstein, Spring 2007 Thomas Heatherwick, Spring 2008 Cameron Sinclair, Spring 2009 Tom Vanderbilt, Spring 2010 Edward Glaeser, Spring 2012 Dr. Richard Jackson, Fall 2012 Toni L. Griffin, Fall 2013 Sarah Herda, Spring 2015 Justin Hollander, Spring 2016 Andrew Altman, Fall 2016 Justin Garrett Moore, Spring 2018 Anab Jain, Fall 2018

*Sam's Fund* (2006) Established by Susan Mead in honor of her grandson, Sam Roane, to support student scholarships in the School of Architecture.

*Ulli Scharnberg Scholarship in Memory of Carroll L.V. Meeks Fund* (2001) Established by Hans-Ullrich Scharnberg (M.Arch. 1959) in honor of History of Architecture Professor Carroll L.V. Meeks (B.A. 1928, B.F.A. in architecture 1931, M.A. 1934) to provide scholarship support for a student who has prior experience in an architect's office.

*School of Architecture Scholarship Fund* (2007) Established by Robert A. Stewart to support student scholarship at the School of Architecture.

*David M. Schwarz Dean's Discretionary Fund* (2002) Established by David M. Schwarz (M.Arch. 1974) to provide incremental income to be used at the discretion of the dean for the general support of the School of Architecture.

*David M. Schwarz Scholarship Fund* (2009) Established by Ken Kuchin in honor of David M. Schwarz (M.Arch. 1974) to provide scholarships for one or more students at the Yale School of Architecture.

*The Vincent Scully Visiting Professorship Fund* (2003) Established in honor of Vincent Scully by an anonymous donor to fund a visiting professorship in architectural history.

*Selby-Vail Fund* (2009) Established by Norman C. Selby (B.A. 1974) and Melissa G. Vail (B.A. 1974) to support term-time teacher-directed travel for students in the undergraduate Architecture major.

*Frederick M.R. Smith Fund* (1997) Established in Yale College by Frederick M.R. Smith (B.A. 1963) to support the undergraduate Architecture major.

*Gordon H. Smith Lectureship in Practical Architecture Fund* (1980) Established by Gordon H. Smith (B.E. 1957) to fund lectures in the School of Architecture. The following persons have delivered a Gordon H. Smith Lecture:

Paul Pippin, Fall 1981 Edward B. Allen, Fall 1982 Malcolm Wells, Spring 1984 David Billington, Fall 1984 William LeMessurier, Spring 1986 Peter Budd, Spring 1987 Stephen Tobriner, Fall 1987 Myron Goldsmith, Fall 1989 Robert Silman, Fall 1990 Eladio Dieste, Fall 1992 Anton Alberts, Spring 1994 Cecil Balmond, Fall 1997 Rafael Viñoly, Spring 1999 Gordon H. Smith, Fall 2000 Jorg Schlaich, Spring 2002 Leslie Robertson, Spring 2003 Edward Feiner, Spring 2004 Chris Wise, Spring 2005 Werner Sobek, Spring 2006 Aine Brazil, Spring 2007 David Billington, Spring 2008 Charles Gwathmey, Elizabeth Skowronek, Robert Leiter, Patrick Bellew, and Arthur Heyde, Spring 2009 Guy Nordenson, Spring 2010 Hanif Kara, Spring 2011 William Baker, Spring 2012 Robert Davidson, Spring 2013

Jim Eyre, Spring 2014 Steve Burrows, Spring 2015 Eugene Kohn, Spring 2016 Elizabeth Plater-Zyberk, Spring 2017 Julie Eizenberg, Spring 2018 Timur Galen and Phillip G. Bernstein, Spring 2019

*Herman D.J. Spiegel Scholarship Fund* (1999) Established by Herman D. J. Spiegel (M.Eng. 1955), former professor and dean of the School of Architecture from 1972 to 1977, to provide scholarship to a student in the School of Architecture who best designs projects that bring together both the study of structural engineering and its design implications.

*Robert A.M. Stern Exhibitions Fund* (2012) Established by Robert A.M. Stern (M.Arch. 1965), dean of the School of Architecture from 1998 until 2016, to support expenses associated with School of Architecture exhibitions in the School of Architecture's Exhibition Gallery.

*Robert A.M. Stern Fund* (2001) Established by Judy and Walter A. Hunt, Jr. (B.A. 1963, M.Arch. 1967) to recognize the accomplishments of Robert A.M. Stern (M.Arch. 1965) as dean from 1998 until 2016 at the School of Architecture. This fund supports School exhibitions, publications, and other efforts to heighten awareness of architecture.

*Robert A.M. Stern Visiting Professorship in Classical Architecture Fund* (2009) Honoring Robert A.M. Stern (M.Arch. 1965), dean of the School of Architecture from 1998 until 2016, this fund was established by Robert Rosenkranz (B.A. 1962), Alexandra Munroe, and friends and colleagues of Robert A.M. Stern. This fund supports a professorship that reflects the tenets of Classical architecture.

*John W. Storrs Scholarship Fund* (2001) Established by Ann S. Lloyd to honor and recognize the distinguished career of her brother, John W. Storrs (B.Arch. 1950), as a practicing architect in Portland, Oregon. This fund supports a scholarship in the School of Architecture.

*Tang Family Scholarship Fund* (2014) Established by Oscar Tang (B.E. 1960); his wife, Hsin-Mei Agnes Hsu; and his daughter, Dana Tang (M.Arch. 1995), to support student scholarships in the School of Architecture for students from China, Hong Kong, Macau, and Taiwan.

*Stanley Tigerman Scholarship Fund* (2004) Initiated by Frank O. Gehry (D.F.A. Hon. 2000) and other friends and family in honor of Stanley Tigerman (B.Arch. 1960, M.Arch. 1961), to provide financial aid for one or more students in the School of Architecture.

*Rutherford Trowbridge Memorial Publication Fund* (1920) Established by Mrs. Rutherford Trowbridge as a memorial to her husband, Rutherford Trowbridge, to support the publication of architectural studies.

*The Jim Vlock First-Year Building Project Fund* (2008) Established in honor of Jim Vlock by Michael Vlock and Karen Pritzker to support the First-Year Building Project at the School of Architecture.

*Robert Allen Ward Fund* (1980) Established by the bequest of Mabel H. Ward to honor her stepson, Robert Allen Ward (B.A. 1928, B.F.A. 1932). This fund supports scholarships in the School of Architecture.

*Richard White Memorial Fund* (1995) Established by the bequest of Jacques Miller (B.F.A. 1938) and gift of Cynthia H. Petersen to benefit students of the School of Architecture, with a preference for activities related to student life. This fund is named in memory of Richard White, a friend's son who perished on the *Titanic*.

*Gertrude Vanderbilt Whitney Fund* (1927) Established by Gertrude Vanderbilt Whitney, wife of Harry Payne Whitney (B.A. 1894), to provide general-purpose support of the School.

*William Wirt Winchester Fund* (1895) Established by Mrs. Jane Ellen Winchester and Mrs. Hannah Bennett as a memorial to their son and brother, William Wirt Winchester, to support a fellowship for study and travel outside the United States and considered to be the School's most prestigious award. Since 1965, the following students have been awarded the William Wirt Winchester Traveling Fellowship:

John I. Pearce and Alexander Purves, 1965 John Wood Galston, 1966 Henry John Gilbert Hawthorn, 1967 Robert Terry Renfro, 1968 Meinhardt J.D. Christiansen Jr., 1969 Roland F. Bedford, 1970 Ray Steven Oliver, 1971 Carison Wade, 1972 John Paul Chadwick Floyd, 1973 Hillary Ann Brown, 1974 James Howard Jorgenson, 1975 Stefani Danes Ledewitz, 1976 Kevin Lichten, 1977 Frederic MacN. Ball, 1978 Kevin Hart, 1979 Turan Duda, 1980 Brian E. Healy, 1981 John A. Boecker, 1982 Frank M. Lupo, 1983 Michael R. Davis, 1984 Robert L. Botswick, 1985 John B. Tittmann, 1986 Douglas A. Garofalo, 1987 Alan W. Organschi, 1988 William Franklin Conway, 1989 Stephen Ellson Brockman, 1990 Sophie Harvey, 1991 Larry Cohen, 1992 Nora E. Demeter, 1993 Andrew David Reeder, 1994

Laura Y. King, 1995 Kumiko Inui, 1996 Leah S. Hall, 1997 Jennifer H. Bloom, 1998 Benjamin William de Rubertis, 1998 Jonathan David Bolch, 1999 Brian Papa, 2000 Robert T. Zirkle, 2001 Ameet N. Hiremath, 2002 Jonathan A. Toews, 2003 Katherine Elizabeth Davies, 2004 Ralph Colt Bagley IV, 2005 Christopher Ray Kitterman, 2006 Gregorio Santamaria Lubroth, 2007 Dana L. Getman, 2008 Parsa Khalili, 2009 Carlos Felix Raspall Galli, 2010 Daniel Gregory Markiewicz, 2011 Miroslava Brooks, 2012 Sarah Frances Gill, 2013 Kathleen Bridget Stranix, 2014 Karolina Maria Czeczek, 2015 Vittorio F. Lovato, 2016 Heather Jean Bizon, 2017 Claire Louise Haugh, 2018 Sharmin Yezdi Bhagwagar, 2019 Ryan Thomas Hughes, 2019

*Gertraud A. Wood Traveling Fund* (1983) Established by Gertraud A. Wood's husband, Leonard Wood, as well as Mrs. Wood's friends and associates, to support a travel prize to be awarded to an outstanding second-year student. Mrs. Wood was the administrative assistant to three deans of the School of Architecture from 1967 through 1981. The following students have been awarded the Gertraud A. Wood Traveling Fellowship: Michael Davis, 1983

Chariss McAfee, 1983 Chariss McAfee, 1984 Margaret Virginia Chapman, 1985 Jennifer Tate, 1986 Camilo Alberto Gonzalez, 1987 Stephen Donald Luoni, 1988 Frieda Margarite Menzer, 1989 Lisa Joyce Quatrale, 1990 Robert Schultz, 1991 Gitta Robinson, 1992 John Bertram, 1993 Michael Benjamin Levy, 1994 Steven Andrew Roberts, 1995 Victor Agran, 1996

Dean Sakamoto, 1997 Kara J. Bartelt, 1998 Cara M. Cragan, 1999 Katharine Stevens, 2000 Victoria Partridge, 2001 Jonathan Toews, 2002 Elicia Keebler, 2003 Jonah C. Gamblin, 2004 Frederick C. Scharmen, 2005 Elisa S.Y. Lui, 2006 Maria Claudia Melniciuc, 2007 Garrett Thomas Omoto, 2007 Catherine E. Anderson, 2008 Matthew A. Roman, 2008 Andrew Ashey, 2009 Matthew Aaron Zych, 2010 Miroslava Brooks, 2011 Christina Argyrou, 2012 Kathleen Bridget Stranix, 2013 Belinda Lee, 2014 Anne Wing Yan Ma, 2015 Margaret Jau-ming Tsang, 2016 David Alston Langdon, 2017 Samuel David Bruce, 2018 Menglan Li, 2018 Rhea Schmid, 2019

George Morris Woodruff, Class of 1857, Memorial Lecture in Architecture (2010) Established by H. Allen Brooks (M.A. 1955) to support a lecture in architecture. The following persons have delivered a George Morris Woodruff, Class of 1857, Memorial Lecture: Eve Blau, Spring 2012 Kurt W. Forster, Spring 2013 Barry Bergdoll, Fall 2013 Kay Bea Jones, Fall 2014 Anthony Vidler, Spring 2015 Kathleen James-Chakraborty, Fall 2015 Maria Gough, Spring 2017 Zeynep Çelik Alexander, Fall 2017 Esra Akcan, Spring 2019

*Professor King-lui Wu Scholarship Fund* (2011) Established by Pei-Tse "Loli" Wu (B.A. 1989) and Vivian Kuan, King-lui Wu's son and daughter-in-law, to support student scholarships in the School of Architecture.

*Professor King-lui Wu Teaching Fund* (2006) To honor the legacy of Professor King-lui Wu, who taught at the School of Architecture for fifty-one years beginning in 1946, this fund was established by Pei-Tse "Loli" Wu (B.A. 1989) and Vivian Kuan, King-lui

Wu's son and daughter-in-law, as well as by friends, colleagues, and former students of Professor Wu. This fund recognizes faculty members who combine architectural practice with outstanding teaching by providing faculty with financial support. Recipients are selected by the vote of graduating students. The following faculty members have received the award:

Thomas H. Beeby, 2007 Keith Krumwiede, 2008 Alexander Purves, 2009 Eeva-Liisa Pelkonen, 2010 Sunil Bald, 2011 Deborah Berke, 2012 Peter de Bretteville, 2013 Emmanuel Petit, 2014 Adam Hopfner, 2015 George Knight, 2015 Trattie Davies, 2016 Kyle Dugdale, 2016 Emily Abruzzo, 2017 Miroslava Brooks, 2018 Michael Surry Schlabs, 2019

### TERM FUNDS

The School of Architecture has the following term funds. The date of the gift and the name of the donor are given in each instance.

*Sonia Albert Schimberg Prize* (1976) Established as a memorial by the family of Sonia Schimberg (M.Arch. 1950). This fund provides a prize to a graduating woman student recognized for outstanding academic performance.

*School of Architecture Undergraduate Discretionary Fund* (2010) Established by Michael C. Barry (B.A. 2009) to help defray the costs to students for materials and supplies required for class and studio assignments.

*David M. Schwarz/Architectural Services Good Times Award* (2000) Established by David Schwarz (M.Arch. 1974) to provide a graduating student with a fellowship to travel in Europe.

David M. Schwarz/Architectural Services Summer Internship and Traveling Fellowship (2000) Established by David Schwarz (M.Arch. 1974) to provide a non-graduating student with a summer internship and a traveling fellowship.

*David Taylor Memorial Prize* (1996) Established as a memorial to David Taylor, a student at the School from 1992 through 1994, who was stricken with an illness that took his life in 1995. This fund provides to a graduating student a prize to honor David's strong interest in architectural criticism and his commitment to the pursuit of excellence in residential architecture.

# School of Architecture Students

### **DEGREES CONFERRED**, 2019

Master of Architecture Melinda Marlén Agron Olisa Ugo Agulue Lara Yasser AlKhouli Dana AlMathkoor Kate Eleanor Altmann Tayyaba Anwar Diego Arango Gwyneth Amanda Bacon-Shone Maria Isabel Balda Moncayo Lani Mei Barry Sharmin Yezdi Bhagwagar Antonino B. Boornazian David Hunter Bransfield Davis Samuel Butner Brian Jeffrey Cash Haylie Hoi Ki Chan Kunhee Chang Shiyan Chen Yipeng Cui Nicole Magsaysay Doan Alejandro Duran Kate Nicole Fisher Zelig Siu Lum Fok Pik-Tone Fung Kerry Danaher Garikes Shiyu Guo Orli Hakanoglu Dimitris Hartonas Ryan Thomas Hughes Varoon Chandan Kelekar Erin Hyelin Kim Jincy George Kunnatharayil Hsin-Ju Lai Dylan Seoyoon Lee Kassandra Maria Leiva Menglan Li Jeffrey Zhenhua Liu Martin Chung Him Man Larkin Patrick Daniel McCann

Nicholas Alexander Miller Minakshi Mohanta Kolawole Anita Ofoman Benjamin D. Olsen Iven Sze Kiat Peh Jesus Javier Perez Mariana São Pedro Riobom Dos Santos Anna Jordan Bodeen Rothschild Melissa A. Russell Evan Daniel Sale Miguel Sanchez Enkerlin Jacob S. Schaffert Michael Semenov Dhruvin Sunil Shah Priyanka Sanjeev Sheth Abigail Li Smith Luke Claude Studebaker Colin Hollingworth Sutherland Aslan Taheri Christopher Dylan Tritt Wei-Shih Tsai Lucia Venditti Matthew Leo Wagstaffe Minquan Wang Melissa Kendall Weigel Rui Wu Issy Zhe Yi Xiaoyue Yin Millie Yoshida Winston Gee Kong Yuen Ethan Norris Zisson

### Master of Environmental Design

B. Jack Hanly Jonathan Giles Hopkins Maia Adele Simon Dina Mamdouh Mohamed Fathy Taha Jingqiu Zhang

**Doctor of Philosophy** Awarded by the Graduate School of Arts and Sciences Eugene H. Han

# Awards

The following awards were made in the academic year 2018–2019. The date each award was established is shown in parentheses.

# AWARD

*Professor King-lui Wu Teaching Award* (2006) Awarded each year to a faculty member who combines architectural practice with outstanding teaching. Recipients are selected by the vote of graduating students. Awarded to Michael Surry Schlabs.

# FELLOWSHIPS

*William Wirt Winchester Traveling Fellowship* (1895) Awarded each year to the graduating students in architecture whose academic performance has been consistently at the highest level, who have displayed the most promise and potential for a future professional role, and who have completed a piece of distinguished independent work. It provides an opportunity for study and travel outside the United States and is considered to be the School's most prestigious award. Awarded to Sharmin Yezdi Bhagwagar, Ryan Thomas Hughes.

*Gertraud A. Wood Traveling Fellowship* (1983) Awarded each year to an outstanding second-year student in the first professional degree program on financial aid for travel outside of the United States. Awarded to Rhea Schmid.

*George Nelson Scholarship* (1988) Awarded each year through a competitive application process to a second-year student in the first professional degree program for support for an independent course of study. Recipients shall demonstrate skill as a designer, interest in critical thought, and the ability to express ideas in written and verbal form. Awarded to Gioia Connell.

*David M. Schwarz/Architectural Services Good Times Award* (2000) Awarded to a graduating student for travel in Europe. Awarded to Zelig Siu Lum Fok.

# MEDALS AND PRIZES

*American Institute of Architects Henry Adams Medal* (1914) Awarded to the graduating student with the highest academic ranking in the first professional degree program. Awarded to Miguel Sanchez Enkerlin.

*Alpha Rho Chi Medal* (1914) Awarded each year to that graduating student who has shown an ability for leadership, performed willing service for the school and department, and given promise of real professional merit through attitude and personality. Awarded to Nicole Magsaysay Doan.

*William Edward Parsons Memorial Medal* (1941) Presented annually to that member of the graduating class who has done distinctive work and demonstrated the greatest professional promise in the area of city planning. Awarded to Lucia Venditti.

*The H.I. Feldman Prize* (1955) Awarded annually to the student who demonstrates the best solution to an architectural problem in an advanced studio, taking into consideration the practical, functional, and aesthetic requirements of that problem. Awarded to Ryan Thomas Hughes.

*Wendy Elizabeth Blanning Prize* (1976) Awarded annually to the student in the second year of the first professional degree program on financial aid who has shown the most promise of development in the profession. Not awarded in 2018–2019.

*Sonia Albert Schimberg Prize* (1981) Awarded to a graduating woman student for outstanding academic performance. Awarded to Hsin-Ju Lai.

*Janet Cain Sielaff Alumni Award* (1983) The Yale Architecture Alumni Association Award presented annually to that graduating student who most significantly contributed to, and fostered, school spirit. Awarded to Menglan Li.

*Moulton Andrus Award* (1984) Awarded to a graduating student who has achieved excellence in art and architecture. Awarded to Lani Mei Barry.

*The Drawing Prize* (1985) Awarded to the graduating student who has excelled at drawing as part of the design process, is articulate with pencil, and shows architectural ideas with a strong personal graphic style of presentation. Awarded to Erin Hyelin Kim.

*Gene Lewis Book Prize* (1986) Awarded to a graduating student who has shown promise for excellence in residential architecture. Awarded to Diego Arango.

*David Taylor Memorial Prize* (1996) Awarded to the graduating students who have shown promise or demonstrated interest in architectural criticism. Awarded to B. Jack Hanly, Matthew Leo Wagstaffe.

### INTERNSHIPS

Takenaka Corporation Summer Internship (1987) Awarded to Matthew Liu.

David M. Schwarz/Architectural Services Summer Internship and Traveling Fellowship (2000) Awarded to Brenna Thompson.

# Appendix I: School of Architecture Faculty and Administration, 2018–2019

### **Executive Officers**

Peter Salovey, A.B., A.M., Ph.D., President of the University Benjamin Polak, B.A., M.A., Ph.D., Provost of the University Deborah Berke, B.Arch., M.Arch., M.U.P., Dean Sunil Bald, B.A., M.Arch., Associate Dean Phillip G. Bernstein, B.A., M.Arch., Associate Dean Andrew Benner, B.Arch., M.Arch., Assistant Dean Mark Foster Gage, B.Arch., M.Arch., Assistant Dean Bimal Mendis, B.A., M.Arch., Assistant Dean

### **Faculty Emeriti**

Peggy Deamer, B.A., B.Arch., M.A., Ph.D., Professor Emerita of Architecture (spring 2019)
Martin D. Gehner, B.Arch., M.Arch., Professor Emeritus of Architectural Engineering Dolores Hayden, B.A., M.Arch., Professor Emerita of Architecture and Professor Emerita of American Studies
Alexander Purves, B.A., M.Arch., Professor Emeritus of Architecture

### Professors

Sunil Bald, B.A., M.Arch., Associate Dean and Associate Professor Adjunct Deborah Berke, B.F.A., B.Arch., M.U.P., Dean and Professor Kent C. Bloomer, B.F.A., M.F.A., Professor Adjunct Turner Brooks, B.A., M.Arch., Professor Adjunct Peggy Deamer, B.A., B.Arch., M.A., Ph.D., Professor (fall 2018) Anna Dyson, B.A., M.Arch., Hines Professor of Sustainable Architectural Design Keller Easterling, B.A., M.Arch., Professor Peter Eisenman, B.Arch., M.S.Arch., M.A., Ph.D., Charles Gwathmey Professor in Practice Alexander J. Felson, B.A., M.S., M.L.A., Ph.D., Associate Professor Mark Foster Gage, B.Arch., M.Arch., Assistant Dean and Associate Professor Alexander Garvin, B.A., M.Arch., M.U.S., Professor Adjunct Steven Harris, B.A., B.F.A., M.Arch., Professor Adjunct John D. Jacobson, B.A., M.Arch., Professor Adjunct Bimal Mendis, B.A., M.Arch., Assistant Dean and Assistant Professor Adjunct Kyoung Sun Moon, B.S., M.S.C.E., M.Arch., Ph.D., Associate Professor Eeva-Liisa Pelkonen, M.Arch., M.E.D., Ph.D., Associate Professor Alan J. Plattus, B.A., M.Arch., Professor Elihu Rubin, B.A., M.C.P., Ph.D., Associate Professor Joel Sanders, B.A., M.Arch., Professor Adjunct Robert A.M. Stern, B.A., M.Arch., J.M. Hoppin Professor of Architecture

#### **Endowed Visiting Professorships and Fellowships**

#### Fall 2018

Omar Gandhi, Louis I. Kahn Visiting Assistant Professor of Architectural Design Simon Hartmann, William Henry Bishop Visiting Professor of Architectural Design Jesse LeCavalier, Daniel Rose (1951) Visiting Assistant Professor

Lyndon Neri and Rossana Hu, Norman R. Foster Visiting Professors of Architectural Design

Michael Samuelian, Edward P. Bass Distinguished Visiting Architecture Fellow Julie Snow, William B. and Charlotte Shepherd Davenport Visiting Professor of Architectural Design

Anthony Vidler, Vincent Scully Visiting Professor of Architectural History Adam Yarinsky, Eero Saarinen Visiting Professor of Architectural Design

#### Spring 2019

Pier Vittorio Aureli, William B. and Charlotte Shepherd Davenport Visiting Professor of Architectural Design

Sandra Barclay and Jean Pierre Crousse, Norman R. Foster Visiting Professors of Architectural Design

Esther da Costa Meyer, Vincent Scully Visiting Professor of Architectural History Yolande Daniels, Eero Saarinen Visiting Professor of Architectural Design Paul Florian, Robert A.M. Stern Visiting Professor of Architectural Design Jesse LeCavalier, Daniel Rose (1951) Visiting Assistant Professor Thomas Phifer, William Henry Bishop Visiting Professor of Architectural Design Todd Reisz, Louis I. Kahn Visiting Assistant Professor of Architectural Design Brigitte Shim, Louis I. Kahn Visiting Professor of Architectural Design

#### Visiting Faculty

Kurt W. Forster, Ph.D., Professor Emeritus (Visiting)

#### Critics, Lecturers, and Instructors

Emily Abruzzo, B.A., M.Arch., Critic Anthony Acciavatti, B.F.A., B.Arch., M.Arch., M.A., Ph.D., Critic Victor Agran, B.A., M.Arch., Lecturer Maya Alam, Dipl. Ing., M.Arch., Lecturer Mohamed Aly Etman, B.Sc., M.Sc., M.Arch., Ph.D., Scientific Researcher John Apicella, B.Arch., Lecturer Annie Barrett, B.A., M.Arch., Critic Anibal Bellomio, B.Arch., Lecturer Andrew Benner, B.Arch., M.Arch., Critic Phillip G. Bernstein, B.A., M.Arch., Associate Dean and Lecturer Ezio Blasetti, Dipl.A.E., M.S., Lecturer John Blood, B.Arch., M.Arch., Lecturer Dorian Booth, B.A., M.Arch., Lecturer Nikole Bouchard, B.Arch., M.Arch., Critic Kipp Bradford, Sc.B., Sc.M., Lecturer Kyle Bradley, B.Arch., M.Arch., Critic Laura Briggs, B.Arch., M.Arch., Critic

Miroslava Brooks, B.S., M.Arch., Critic Brennan Buck, B.S., M.Arch., Lecturer Luke Bulman, B.A., M.Arch., Lecturer Nathan Burnell, B.S., Instructor Kristen Butts, B.Arch.Eng., M.Arch.Eng., Lecturer Marta Caldeira, M.S., Ph.D., Critic Iñaqui Carnicero, B.Arch., M.Arch., Ph.D., Critic Katherine (Trattie) Davies, B.A., M.Arch., Critic Peter de Bretteville, B.Arch., M.Arch., Critic Kyle Dugdale, B.A., M.Arch., Ph.D., Critic Alastair Elliott, B.S.C.E., M.Eng.C.E., Lecturer Dov Feinmesser, B.Arch.Sc., M.Arch., Lecturer Martin J. Finio, B.Arch., Critic Bryan Fuermann, B.A., M.A., Ph.D., M.Des.S., Lecturer Anthony Gagliardi, B.A., M.Arch., Critic Kevin D. Gray, B.A., M.Arch., M.B.A., Lecturer Lisa Gray, B.A., M.Arch., Critic Andrei Harwell, B.Arch., M.Arch., Critic Erleen Hatfield, B.S.A.S., M.S.Civ.Eng., Lecturer Robert Haughney, B.S., Lecturer Kristin Hawkins, B.S., M.Arch., Lecturer Gavin Hogben, B.A., M.A., Critic Adam Hopfner, B.A., M.Arch., Critic Joyce Hsiang, B.A., M.Arch., Critic Alicia Imperiale, B.Arch., M.F.A., M.A., Ph.D., Critic Elisa Iturbe, B.A., M.Arch., M.E.M., Critic Laurence Jones, B.S., Lecturer Amir Karimpour, B.A., M.Arch., M.Des., Lecturer Yoko Kawai, B.Eng., M.Arch., Ph.D., Lecturer Naomi Keena, B.Arch., M.S.Arch., Ph.D., Scientific Researcher Beom Jun Kim, B.A., M.Arch., Lecturer George Knight, B.A., M.Arch., Critic Jennifer Lan, B.S.C.E., M.S.C.E., Lecturer Amy Lelyveld, B.A., M.Arch., Critic Aaron Martin, B.S.M.E., M.S.M.E., Lecturer Nicholas McDermott, B.A., M.Arch., Critic Joeb Moore, B.S., M.Arch., M.E.D., Critic Gina Narracci, B.Arch., Lecturer Timothy Newton, B.Arch., M.Arch., Critic Brittany Olivari, B.S., M.Arch., Instructor Alan W. Organschi, B.A., M.Arch., Critic Mark Peterson, B.A., M.Arch., Lecturer Miriam Peterson, B.A., M.Arch., Critic Laura Pirie, B.Des., M.Arch., Lecturer Victoria Ponce de Leon, B.S., B.E., Lecturer Daniele Profeta, B.Arch., M.Arch., Lecturer

Craig Razza, B.S.M.E., Lecturer Pierce Reynoldson, B.S., M.Arch., Lecturer Kevin Rotheroe, B.S., M.Arch., M.Des.S., D.Des., Lecturer Andrew Ruff, B.Arch., M.E.D., Critic Michael Surry Schlabs, B.A., M.Arch., Ph.D., Critic Aniket Shahane, B.Arch., M.Arch., Critic Chris Sharples, B.F.A., B.A., M.Arch., Critic Edward M. Stanley, B.S., B.S.C.E., M.S.Str.E., Lecturer Michael Szivos, B.Arch., M.S.A.A.D., Critic Celia Toché, B.A., M.Arch., Lecturer Adam Trojanowski, B.S., M.S., Lecturer Alexa Tsien-Shiang, B.A., M.Arch., Critic Carter Wiseman, B.A., M.A., Lecturer Dragana Zoric, B.A., M.Arch., Critic

#### Associated Faculty

Amy Wrzesniewski, B.A., M.A., Ph.D., Michael H. Jordan Professor at the Yale School of Management

#### Administrative Staff

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## Appendix II: Study Areas and Course Descriptions, 2018–2019

#### DESIGN AND VISUALIZATION

Brennan Buck and Mark Foster Gage, Study Area Coordinators

This study area encompasses required studios, elective advanced studios, and courses that concentrate on design logic and skills and that support design thinking and representation.

For the M.Arch. I program, required courses in this study area include a core sequence of four design studios, two advanced studios, a course in formal analysis (1018a), and a visualization elective course. The core studio sequence progresses from spatially abstract exercises to more complex programs that require integrative thinking at various scales and situated on sites of increased complexity, while integrating ecological, landscape, and tectonic demands. The first course (1000c) is a summer course required for entering students who have not had significant prior architectural training. A further visualization course (1019c) – in the early summer of the first year – is required of all M.Arch. I students.

For the M.Arch. II program, required courses in this study area include a core design studio (1061a), three advanced studios, and a course in computation analysis and fabrication (1062a).

## **Required** Courses

**1000C, Architectural Foundations** o credits. (Required of incoming M.Arch. I students with little or no academic background in architecture.) This summer course is an intensive, five-week immersion into the language of architectural representation and visualization, offering a shared inventory and basic framework upon which to build subsequent studies. Students are introduced to techniques and conventions for describing the space and substance of buildings and urban environments, including orthographic drawing, axonometric projection, perspective, architectural diagramming, vignette sketching, and physical modeling. Students work in freehand, hard-line, and digital formats. In parallel to the visualization portion of this course, an introduction to architectural history and theory focuses on principal turning points of thought and practice through to the eighteenth century. For 2018 the course was taught from July 16 until August 17. Bimal Mendis, coordinator; Miroslava Brooks, Kyle Dugdale

**1011a**, **Architectural Design: First M.Arch. I Core Studio** 9 credits. (Required of firstyear M.Arch. I students.) This studio is the first of four core design studios where beginning students bring to the School a wide range of experience and backgrounds. Exercises introduce the complexity of architectural design by engaging problems that are limited in scale but not in the issues they provoke. Experiential, social, and material concerns are introduced together with formal and conceptual issues. Brennan Buck, coordinator; Nikole Bouchard, Miroslava Brooks, Nicholas McDermott, Michael Szivos **1012b, Architectural Design: Second M.Arch. I Core Studio** 9 credits. (Required of first-year M.Arch. I students.) This second core studio continues to extend spatial exploration into the conception and design of a building through studies of scale, site, program, and materiality. The term is organized by a series of projects that culminate with the design of a building that engages both public and private space. Prerequisite: 1011a. Katherine (Trattie) Davies, coordinator; Sunil Bald, Peter de Bretteville, Joeb Moore, Miriam Peterson

**1018a, Formal Analysis** 3 credits. (Required of first-year M.Arch. I students; available as an elective for M.Arch. II and M.E.D. students who obtain permission of the instructor.) This course studies the object of architecture – canonical buildings in the history of architecture – not through the lens of reaction and nostalgia but through a filter of contemporary thought. The emphasis is on learning how to see and to think architecture by a method that can be loosely called "formal analysis." Reading assignments and one formal analysis are assigned each week. Peter Eisenman

**1019c, Visualization and Computation** 3 credits. (Required of first-year M.Arch. I students, early summer. No waivers allowed.) This seven-week intensive course covers the fundamentals and implications of four specific sets of digital software and skills: building information modeling (BIM); virtual realities; image making; and scripting and algorithmic design. Each section is taught by a different instructor who brings specific experience to both tutorials and discussions on the broader impact of computation on the field. For 2019 the course was taught from May 13 until June 28. Brennan Buck, coordinator; Maya Alam, Dorian Booth, Dov Feinmesser, Beom Jun Kim, Daniele Profeta, Julie Zink

**1021a**, Architectural Design: Third M.Arch. I Core Studio 6 credits. (Required of second-year M.Arch. I students.) This third core studio concentrates on a medium-scale public building, focusing on the integration of composition, site, program, mass, and form in relation to structure, and methods of construction. Interior spaces are studied in detail. Large-scale models and drawings are developed to explore design issues. Prerequisite: 1012b. Emily Abruzzo, coordinator; Annie Barrett, Laura Briggs, Peter de Bretteville, Iñaqui Carnicero, Martin Finio

**1022b, Architectural Design: Fourth M.Arch. I Core Studio** 9 credits. (Required of second-year M.Arch. I students.) This fourth and final M.Arch I core studio expands on the fundamental architectural skills introduced in the previous three terms to examine the role of architecture and the architect at the scale of the city. Extending beyond the bounds of a building, this course examines a variety of forces – architectural, urban, social, economic, ecological, political, and others – that shape and order our built environment, emphasizing and cultivating a range of architectural themes and skills. Prerequisite: 1021a. Aniket Shahane, coordinator; Anthony Acciavati, Alicia Imperiale, Jesse LeCavalier, Bimal Mendis, Dragana Zoric

**1061a, Post-Professional Design Studio** 9 credits. (Required of and limited to first-year M.Arch. II students.) This studio is specially designed for incoming post-professional students to introduce them to the School's educational program and faculty. Each student is given the opportunity to examine in depth a sequence of design problems. Joel Sanders, Sunil Bald

**1062a**, **Computation Analysis Fabrication** 3 credits. (Required of and limited to firstyear M.Arch. II students.) This course investigates and applies emerging computational theories and technologies through the design and fabrication of a full-scale building component and/or assembly. This investigation includes various static, parametric, and scripted modeling paradigms, computational-based structural and sustainability analysis, and digital fabrication technologies. Students work in pairs to design, analyze, and fabricate a full-scale constructed piece. Amir Karimpour

## Advanced Design Studios (Fall)

Advanced studios are limited in enrollment. Selection for studios is determined by lottery.

1101a, Advanced Design Studio 9 credits. Julie Snow, Davenport Visiting Professor

1102a, Advanced Design Studio 9 credits. Simon Hartmann, Bishop Visiting Professor; Michael Samuelian, Bass Distinguished Visiting Architecture Fellow

1103a, Advanced Design Studio 9 credits. Adam Yarinsky, Saarinen Visiting Professor

1104a, Advanced Design Studio 9 credits. Peter Eisenman, Gwathmey Professor in Practice

1105a, Advanced Design Studio 9 credits. Lyndon Neri and Rossana Hu, Foster Visiting Professors

1106a, Advanced Design Studio 9 credits. Omar Gandhi, Kahn Visiting Assistant Professor

1107a, Advanced Design Studio 9 credits. Lisa Gray and Alan Organschi

## Advanced Design Studios (Spring)

Advanced studios are limited in enrollment. Selection for studios is determined by lottery.

1111b, Advanced Design Studio 9 credits. Pier Vittorio Aureli, Davenport Visiting Professor

1112b, Advanced Design Studio 9 credits. Thomas Phifer, Bishop Visiting Professor

1113b, Advanced Design Studio 9 credits. Brigitte Shim, Kahn Visiting Professor

1114b, Advanced Design Studio 9 credits. Yolande Daniels, Saarinen Visiting Professor

1115b, Advanced Design Studio 9 credits. Sandra Barclay and Jean Pierre Crousse, Foster Visiting Professors

1116b, Advanced Design Studio 9 credits. Paul Florian, Stern Visiting Professor

1117b, Advanced Design Studio 9 credits. Todd Reisz, Kahn Visiting Assistant Professor

1118b, Advanced Design Studio 9 credits. Anna Dyson and Chris Sharples

**1199b, Thesis** 9 credits. Proposals for the Thesis option must be submitted for review and approval by the Design and Rules Committees by the Friday of Jury Week for the preceding spring term. Proposals must include an abstract, a proposal, a bibliography,

a proposed schedule and adviser, a methodology statement, and the student's current portfolio. Students with approved proposals can take an Independent Study with an instructor of choice in the fall term as thesis preparation. Faculty

## Elective Courses

**1211a**, **Drawing and Architectural Form** 3 credits. With the emergence of increasingly sophisticated digital technologies, the practice of architecture is undergoing the most comprehensive transformation in centuries. Drawing, historically the primary means of generation, presentation, and interrogation of design ideas, is currently ill-defined and under stress. This course examines the historical and theoretical development of descriptive geometry and perspective through the practice of rigorous constructed architectural drawings. The methods and concepts studied serve as a foundation for the development of drawings that consider the relationship between a drawing's production and its conceptual objectives. Weekly readings, discussions, and drawing exercises investigate the work of key figures in the development of orthographic and three-dimensional projection. Ultimately, the goal is to engage in a focused dialogue about the practice of drawing and different methods of spatial inquiry. Limited enrollment. Victor Agran

1216b, Ornament Theory and Design 3 credits. This seminar begins by reviewing major writings governing the identity of ornament, e.g., Isidore of Seville, Owen Jones, Riegl, Sullivan, Beeby, etc., including distinguishing between "ornament" and "decoration." Twentieth-century actions against ornament are also examined. After a survey of Classical, Victorian, Art Nouveau, and Art Deco ornament, the focus is on ornament in twenty-first-century design. Readings, exercises, individual final projects, and a portfolio are required. Limited enrollment. Kent Bloomer

**1222b, Diagrammatic Analysis** 3 credits. Using formal analysis as a method to understand architectural form, this seminar provides students with an understanding of the complexities of current architectural production and helps them to become fluent in the language of form. Students are required to produce weekly drawings and to participate in reading discussions on specific buildings, ranging from Renaissance to contemporary. Limited enrollment. Peter Eisenman, Anthony Gagliardi

**1224a, The Chair** 3 credits. The chair has been a crucible for architectural ideas and their design throughout the trajectory of modern architecture. The chair is both a model for understanding architecture and a laboratory for the concise expression of idea, material, fabrication, and form. As individual as its authors, the chair provides a medium that is a controllable minimum structure, ripe for material and conceptual experiments. In this seminar, students develop their design and fabrication skills through exploration of the conceptual, aesthetic, and structural issues involved in the design and construction of a full-scale prototype chair. Limited enrollment. Timothy Newton, Nathan Burnell

**1227b, Drawing Projects** 3 credits. Each student admitted to the course comes prepared with a particular subject that is investigated through the media of drawing for the entire term. There is a weekly evening pin-up with group discussion of the work in progress. Limited enrollment. Turner Brooks

1228b, Disheveled Geometries: Ruins and Ruination 3 credits. Architectural ruins index the total failure of individual buildings, technologies, economies, or, at times, entire civilizations. This course researches the topics of ruination and architectural ruinswhat produces them, what defines them, and how they impact individuals, cities, and civilizations on levels from the visual and formal to the philosophical and psychological. The formal and visual materials of this course emerge from the study of ruins from not only the past and present, but also the future, through research into the speculative territories of online "ruin porn," new genres of art practice, and in particular dystopian television and film projects that reveal an intense contemporary cultural interest in apocalyptic themes. While significant nineteenth-century theories of architectural ruination, including those of John Ruskin (anti-restoration) and Eugène Emmanuel Viollet-le-Duc (pro-restoration), are addressed, the primary intellectual position of the course emerges from readings and discussions of the philosophical methodology of "ruination." Student projects involve the philosophical and aesthetic ruination of iconic architectural projects to determine not only their essential qualities, but hidden, latent ones as well. Subsequent group discussion of this work vacillates between philosophical and aesthetic poles in an attempt to tease out new observations on these projects as well as on the nature of ruins and ruination. The self-designed final project is determined pending consultation between the students and instructor, but involves photorealistic failure of past, present, or future architectural or urban projects; dystopic visual speculations; fabrication experiments that test actual material decay and failure; or attempts to reproduce the aesthetic ambitions of ruin porn through the manipulation of existing, or the design of new, projects. The goal of the course is not to convey an existing body of architectural knowledge, but to unearth a new architectural discourse that considers architecture in reverse - emphasizing its decay rather than its creation in an effort to reveal new territories of architectural agency. Limited enrollment. Mark Foster Gage

**1233a, Composition** 3 credits. This seminar addresses issues of architectural composition and form in four three-week exercises titled Form, Structure, Section, and Elevation. Leaving aside demands of program and site in order to concentrate on formal relationships and the impact of alternative strategies, these exercises are intended to develop techniques by which words, briefs, written descriptions, intentions, and requirements can be translated into three dimensions. Each subject is introduced by a one-hour lecture on organizational paradigms in works of architecture from many periods and a variety of cultures. The medium is both physical and 3-D digital models. Multiple iterations emerging from the first-week sketches and finalized in the following week are the basis for the generation of multiple, radically differing strategies, each with its own unique possibilities and consequences. Limited enrollment. Peter de Bretteville

1240a, Custom Crafted Components 3 credits. This historically grounded, hands-on, project-based seminar requires individual aesthetic expression via the crafting of tangible, original, intimately scaled architectural elements. Exploration and experimentation with unusual combinations and sequences of analog and digital representation are encouraged by way of challenging preconception and expanding the spectrum of aesthetic expression. Selected iterations are developed into designs for specific building components and contexts. Relationships between creative liberty, craft, and manufacturing are explored

via prototyping custom components using materials, means, and methods that are reasonable in contemporary professional practice. Limited enrollment. Kevin Rotheroe

**1241a, Rendered: Art, Architecture, and Contemporary Image Culture** 3 credits. This course addresses the role of digital production and image making in art and architecture at a time when consumers of culture, including architects, are inundated by digital images. Contemporary image culture has profound effects on how we understand authorship, materiality, and representation. The course examines the impact of the Internet on contemporary art and recent writing on aesthetic concepts, including post-digital, post-medium, and the new aesthetic. Students are asked to speculate on the current and future role of the image as an architectural medium in this context. The final project is a hybrid image-object situated in both a physical and an online context. Limited enrollment. Brennan Buck

**1242b**, Architecture and Illusion 3 credits. This seminar examines the synthesis of architectural and representational space achieved during the Baroque period. In addition to the vanishing point and view point previously defined by perspective drawing, painter-architects, such as Andrea Pozzo, introduced a third point into their constructions, a station point occupied by the viewer, which for the first time synthesized building and drawing. Despite its popularity, architectural trompe l'oeil has been discounted since Pozzo's own time as a visual trick that collapses when viewed from multiple points. Technologically, its effects pale in comparison to the illusive power of contemporary media, but this seminar posits that trompe l'oeil has renewed relevance today amid revived interest in representation and its potential to create multiplicitous and ambiguous legibility. After establishing a conceptual foundation addressing both Western and non-Western modes of drawing, students develop a trompe l'oeil case study, speculating on the multiple implied volumes their precedent suggests and testing the threshold between representational and physical space. Limited enrollment. Brennan Buck

**1243b**, **Graphic Inquiry** 3 credits. This seminar explores how architects might use a wider array of communication processes – from text to image, from moving image to network and beyond – to describe, develop, and release their ideas strategically. The inquiry includes, but goes beyond, graphic tools to explore alternate models of knowledge creation; it is akin to research but is more open-ended in terms of its methodologies and possible outcomes. Architecture in this sense is seen in the context of a wide variety of other subjects. This seminar is structured in three parts, each one looking at a different communication medium and its effects: moving image, printed pamphlet, and a single surface/function web graphic. Each of these media implies different ideas of duration, attention, audience, and distribution and is explored through a series of activities: illustrated talks, readings, precedent studies, and three projects developed by each student. Limited enrollment. Luke Bulman

**1291C, Rome: Continuity and Change** 3 credits. (Open only to M.Arch. I secondyear and M.Arch. II first-year students. Enrollment subject to the permission of the instructors and satisfactory completion of all required preparatory course work.) This intensive five-week summer workshop takes place in Rome and is designed to provide a broad overview of that city's major architectural sites, topography, and systems of urban organization. Examples from antiquity to the present day are studied as part of the context of an ever-changing city with its sequence of layered accretions. The seminar examines historical continuity and change as well as the ways in which and the reasons why some elements and approaches were maintained over time and others abandoned. Hand drawing is used as a primary tool of discovery during explorations of buildings, landscapes, and gardens, both within and outside the city. Students devote the final week to an intensive independent analysis of a building or place. M.Arch. I students are eligible to enroll in this course after completing at least three terms. This course does not fulfill either the History and Theory or the Urbanism and Landscape elective requirements. Limited enrollment. Bimal Mendis, coordinator; Miroslava Brooks, Bryan Fuermann, Stephen Harby, Joyce Hsiang, George Knight

**1299a or b, Independent Course Work** 3 or 6 credits. Program to be determined with a faculty adviser of the student's choice and submitted, with the endorsement of the study area coordinator, to the Rules Committee for confirmation of the student's eligibility under the rules. (See the School's *Academic Rules and Regulations*.)

#### ELECTIVES OUTSIDE OF SCHOOL OF ARCHITECTURE

The following courses offered elsewhere in the University may be taken for credit with permission of the instructor. Unless otherwise indicated, at the School of Architecture full-term courses are typically assigned 3 credits; half-term courses are assigned 1.5 credits.

**ART 110b, Sculpture Basics** Concepts of space, form, weight, mass, and design in sculpture are explored and applied through basic techniques of construction and material, including gluing and fastening, mass/weight distribution, hanging/mounting, and surface/finishing. Hands-on application of sculptural techniques and review of sculptural ideas, from sculpture as a unified object to sculpture as a fragmentary process. The shops and classroom studio are available during days and evenings throughout the week. Recommended to be taken before ART 120–125. Enrollment limited to twelve. Lab/materials fee: \$150. Erika Vogt

**ART 111a or b, Visual Thinking** An introduction to the language of visual expression, using studio projects to explore the fundamental principles of visual art. Students acquire a working knowledge of visual syntax applicable to the study of art history, popular culture, and art. Projects address all four major concentrations (graphic design, painting/ printmaking, photography, sculpture). No prior drawing experience necessary. Open to all undergraduates; required of all art majors. Lab/materials fee: \$25. Alexander Valentine, Anahita Vossoughi

**ART 114a or b, Basic Drawing** An introduction to drawing, emphasizing articulation of space and pictorial syntax. Class work is based on observational study. Assigned projects address fundamental technical and conceptual problems suggested by historical and recent artistic practice. No prior drawing experience necessary. Open to all undergraduates; required of all art majors. Lab/materials fee: \$25. Christian Curiel, Matthew Keegan, Samuel Messer, Troy Michie, Sophie Naess, Robert Storr, Anahita Vossoughi, and faculty

**ART 116b, Color Practice** Study of the interactions of color, ranging from fundamental problem solving to individually initiated expression. The collage process is used for most class assignments. Lab/materials fee: \$75. Halsey Rodman

**ART 120b, Introduction to Sculpture: Wood** Introduction to wood and woodworking technology through the use of hand tools and woodworking machines. The construction of singular objects; strategies for installing those objects in order to heighten the aesthetic properties of each work. How an object works in space and how space works upon an object. Lab/materials fee: \$75. Prerequisite: ART 110. Elizabeth Tubergen

**ART 1214, Introduction to Sculpture: Metal** Introduction to working with metal through examination of the framework of cultural and architectural forms. Focus on the comprehensive application of construction in relation to concept. Instruction in welding and general metal fabrication. Ways in which the meaning of work derives from materials and the form those materials take. Lab/materials fee: \$75. Prerequisite: ART 110. Brent Howard

**ART 1300 or b, Painting Basics** A broad formal introduction to basic painting issues, including the study of composition, value, color, and pictorial space. Emphasis on observational study. Course work introduces students to technical and historical issues central to the language of painting. Recommended for non-majors and art majors. Lab/materials fee: \$75. Robert Storr, Molly Zuckerman-Hartung, and faculty

**ART 132a or b, Introduction to Graphic Design** A studio introduction to visual communication, with emphasis on the visual organization of design elements as a means to transmit meaning and values. Topics include shape, color, visual hierarchy, word-image relationships, and typography. Development of a verbal and visual vocabulary to discuss and critique the designed world. Lab/materials fee: \$150. Julian Bittiner, Yeju Choi, Henk van Assen

**ART 265b, Typography: Expression, Structure, and Sequence** Continued studies in typography, incorporating more advanced and complex problems. Exploration of grid structures, sequentiality, and typographic translation, particularly in the design of contemporary books, and screen-based kinetic typography. Relevant issues of design history and theory discussed in conjunction with studio assignments. Lab/materials fee: \$150. Prerequisite: ART 264. Henk van Assen

**ART 301b, Critical Theory in the Studio** Key concepts in modern critical theory as they aid in the analysis of creative work in the studio. Psychoanalysis, Marxism, feminism, structuralism, and poststructuralism are examined in relation to modern and contemporary movements in the visual arts, including cubism, surrealism, Arte Povera, pop, minimalism, conceptual art, performance art, the Pictures group, and the current relational aesthetics movement. Lab/materials fee: \$25. Jonathan Weinberg

**ART 346a, Dematerial/Material** Exploration of questions and topics pertinent to contemporary sculpture through making, writing, reading, looking, critique, discussions, and field trips. Projects become increasingly self-directed as students develop relationships to materials, techniques, and ideas both familiar and new. Limited enrollment. Lab/materials fee: \$75. Prerequisite: ART 120, 121, 122, or equivalent; or permission of the instructor. Elizabeth Tubergen **ART 356a, Printmaking I** An introduction to intaglio (drypoint and etching), relief (woodcut), and screen printing (stencil), as well as the digital equivalents of each technique, including photo screen printing, laser etching, and CNC milling. How the analog and digital techniques inform the outcome of the printed image, and ways in which they can be combined to create more complex narratives. Lab/materials fee: \$150. Prerequisite: Art 114 or equivalent. Alexander Valentine

**ART 368a, Graphic Design Methodologies** Various ways that design functions; how visual communication takes form and is recognized by an audience. Core issues inherent in design: word and image, structure, and sequence. Analysis and refinement of an individual design methodology. Attention to systematic procedures, techniques, and modes of inquiry that lead to a particular result. Lab/materials fee: \$150. Prerequisites: ART 132 and ART 264, or permission of the instructor. Pamela Hovland and faculty

**ART 370a, Motion Design** A studio class that explores how the graphic designer's conventions of print typography and the dynamics of word-image relationship change with the introduction of time, motion, and sound. Projects focus on the controlled interaction of words and images to express an idea or tell a story. The extra dimensions of time-based communications; choreography of aural and visual images through selection, editing, and juxtaposition. Lab/materials fee: \$150. Prerequisite: ART 265; ART 368 recommended. Christopher Pullman

**CPSC 578a, Computer Graphics** Introduction to the basic concepts of two- and threedimensional computer graphics. Topics include affine and projective transformations, clipping and windowing, visual perception, scene modeling and animation, algorithms for visible surface determination, reflection models, illumination algorithms, and color theory. Holly Rushmeier

**DRAM 102a/b, Scene Design** An introduction for all non-design students to the aesthetics and the process of scenic design through critique and discussion of weekly projects. Emphasis is given to the examination of the text and the action of the play, the formulation of design ideas, the visual expression of the ideas, and especially the collaboration with directors and all other designers. Three hours a week. Open to nondepartmental and non-School of Drama students with prior permission of the instructor. Riccardo Hernandez, Michael Yeargan

**DRAM 229a, Theater Planning and Construction** This course is an introduction to planning, design, documentation, and construction of theaters, concert halls, and similar spaces. Emphasis is placed on the role of the theater consultant in functional planning and architectural design. The goal is to introduce the student to the field and provide a basic understanding of the processes and vocabulary of theater planning. Open to nondepartmental and non-School of Drama students with permission of the instructor. Eugene Leitermann

**F&ES 754a, Geospatial Software Design** This course introduces computer programming tools and techniques for the development and customization of geospatial dataprocessing capabilities. It relies heavily on use of the Python programming language in conjunction with ESRI's ArcGIS and JavaScript in conjunction with Google's Earth Engine geographic information systems (GIS). Three hours lecture, problem sets. Prerequisite: previous experience in GIS. C. Dana Tomlin

**F&ES 755b, Modeling Geographic Space** An introduction to the conventions and capabilities of image-based (raster) geographic information systems (GIS) for the analysis and synthesis of spatial patterns and processes. In contrast to F&ES 756, the course is oriented more toward the qualities of geographic space itself (e.g., proximity, density, or interspersion) than the discrete objects that may occupy such space (e.g., water bodies, land parcels, or structures). Three hours lecture, problem sets. No previous experience is required. C. Dana Tomlin

**F&ES 756a, Modeling Geographic Objects** This course offers a broad and practical introduction to the nature and use of drawing-based (vector) geographic information systems (GIS) for the preparation, interpretation, and presentation of digital cartographic data. In contrast to F&ES 755, the course is oriented more toward discrete objects in geographical space (e.g., water bodies, land parcels, or structures) than the qualities of that space itself (e.g., proximity, density, or interspersion). Three hours lecture, problem sets. No previous experience is required. C. Dana Tomlin

#### TECHNOLOGY AND PRACTICE

Martin Finio and Kyoung Sun Moon, Study Area Coordinators

This study area explores fundamental theories and methods of building technologies and the relationships among these technologies, architectural design, and the larger natural environment. Courses examine materials, construction, structural systems, and the environmental technologies that provide healthy, productive, sustainable, and comfortable environments. This area also covers professional practice and examines the relationship between methods of construction, procurement, and management. Advanced courses investigate specific technical systems in greater detail, survey emerging methods and technologies, and explore the relationship between building technologies and architectural design in current practice and writings.

For the M.Arch. I program, requirements in this study area include six courses that survey common technical systems used in buildings and integrate the consideration of these technical systems into architectural design through a series of projects of increasing complexity. In addition, there is a required course on architectural practice.

## **Required** Courses

**2011a**, **Structures I** 3 credits. (Required of first-year M.Arch. I students.) An introduction to the analysis and design of building structural systems and the evolution and impact of these systems on architectural form. Lectures and homework assignments cover structural classifications, fundamental principles of mechanics, computational methods, and the behavior and case studies of truss, cable, arch, and simple framework systems. Discussion sections explore the applications of structural theory to the design of wood and steel systems for gravity loads through laboratory and computational exercises and design projects. Homework, design projects, and midterm and final examinations are required. Kyoung Sun Moon **2012b**, **Structures II** 3 credits. (Required of first-year M.Arch. I students.) This course is a continuation of introductory analysis and design of building structural systems. The course introduces materials and design methods of timber, steel, and reinforced concrete. Structural behavior, ductility concepts, movement, and failure modes are emphasized. Geometric properties of structural shapes, resistances to stresses, serviceability, column analysis, stability, seismic, wind load, and lateral force resisting systems are presented. Homework involves calculations, descriptive analysis, and the building and testing of structural models. Midterm and final examinations are required. Prerequisite: 2011a. Kyoung Sun Moon

2016b, Building Project I: Research, Analysis, Design 3 credits. (Required of first-year M.Arch. I students.) This course explores the conception and construction of dwelling space in the city. Through a term-long process of collaborative research, analysis, design, and technical documentation, student teams examine the specific relationship of the human body to its environment, the elemental concerns of inhabitation, and the physical, spatial, and technical formation of building. A series of iterative analytical exercises, conducted at a range of scales using various analytical tools and design media, address the building site, its enclosure, apertures, interior surfaces, and its fixtures and fittings, and their roles in mediating our experience of private and social space, of weather, and of climate. This collaborative process begins at the start of the term with the formation of design teams and the introduction of our Building Project partners: our clients at Columbus House of New Haven, a New Haven-based shelter and permanent supportive housing provider for the homeless, and the New Haven city officials who administer the city's zoning, building, and life-safety laws and regulations under the auspices of New Haven's Livable City Initiative. Over the course of the term and in conjunction with a series of lectures, field trips, and workshops, each student team develops and documents a distinct and technically detailed design proposal for a two-family house, one of which is selected at the end of the term. This work sets the stage for the second phase of the course and the subsequent work of the summer: the construction of the Jim Vlock Building Project house in New Haven's Hill neighborhood. Alan Organschi, coordinator; Amy Lelyveld, Joeb Moore

**2017c, Building Project II: Construction** 3 credits. (Required of first-year M.Arch. I students, early summer.) This course examines the materialization of a building, whereby students are required to physically participate in the construction of a structure that they have designed. By engaging in the act of making, students are exposed to the material, procedural, and technical demands that shape architecture. Construction documents are generated and subsequently put to the test in the field. Students engage in collaboration with each other, and with a client, as they reconcile budgetary, scheduling, and labor constraints, and negotiate myriad regulatory, political, and community agencies. The course seeks to demonstrate the multiplicity of forces that come to influence the execution of an architectural intention, all the while fostering an architecture of social responsibility, providing structures for an underserved and marginalized segment of the community. For 2019 students enrolled in this course were required to work on the project from April 29 through June 28. For more information, see the section on the Building Project online at http://architecture.yale.edu/academics/building-project. Prerequisites: 1011a, 1012b. Adam Hopfner, director; Kyle Bradley and faculty

2021a, Environmental Design 3 credits. (Required of second-year M.Arch. I students.) This course examines the fundamental scientific principles governing the thermal, luminous, and acoustic environments of buildings, and introduces students to the methods and technologies for creating and controlling the interior environment. Beginning with an overview of the Laws of Thermodynamics and the principles of Heat Transfer, the course investigates the application of these principles in the determination of building behavior, and explores the design variables, including climate, for mitigating that behavior. The basic characteristics of HVAC systems are discussed, as are alternative systems such as natural ventilation. The second half of the term draws on the basic laws of physics for optics and sound and examines the application of these laws in creating the visual and auditory environments of a building. Material properties are explored in detail, and students are exposed to the various technologies for producing and controlling light, from daylighting to fiber optics. The overarching premise of the course is that the understanding and application of the physical principles by the architect must respond to and address the larger issues surrounding energy and the environment at multiple scales and in domains beyond a single building. The course is presented in a lecture format. Homework, computational labs, design projects, short quizzes, and a final exam are required. Anna Dyson, Kipp Bradford

**2022b**, Systems Integration and Development in Design 3 credits. (Required of secondyear M.Arch. I students.) This course is an integrated workshop and lecture series in which students learn to develop the technical systems of preliminary design proposals from earlier studio work. The careful advancement of structural form and detail, environmental systems, egress and accessibility, and envelope design, as well as an understanding of the constructive processes from which a building emerges, are all approached systematically, as elements of design used not only to achieve technical and performance goals but also to reinforce and reinform the conceptual origins of the work. The workshop is complemented by a series of lectures from leading structural, environmental, and envelope consultants. Detailed technical drawings and analyses, along with the sustained use of BIM software, are required. Prerequisites: 1021a, 2011a, 2012b, 2021a. Martin Finio, coordinator; Anibal Bellomio, Alastair Elliott, Erleen Hatfield, Robert Haughney, Kristin Hawkins, John Jacobson, Laurence Jones, Jennifer Lan, Gina Narracci, Kari Nystrom, Laura Pirie, Victoria Ponce de Leon, Craig Razza, Pierce Reynoldson, Edward M. Stanley, Philip Steiner, Celia Toché, Adam Trojanowski, and faculty

**2031a**, **Architectural Practice and Management** 3 credits. (Required of third-year M.Arch. I students. No waivers allowed. Available as an elective for M.Arch.II students who obtain permission of the instructor.) The process by which an architectural design becomes a building requires the architect to control many variables beyond the purely aesthetic, and understanding how to control that process is key to successful practice. This course provides an understanding of the fundamentals of the structure and organization of the profession and the mechanisms and systems within which it works as well as the organization, management, and execution of architectural projects. Lectures explore the role and function of the architect, the legal environment, models of practice and office operations, fees and compensation, project delivery models and technology, and project management in the context of the evolution of architectural practice in the delivery of buildings. Phillip Bernstein, John Apicella

#### Elective Courses

**2211b, Technology and Design of Tall Buildings** 3 credits. This seminar investigates the dynamic interrelationship between technology and architecture in tall buildings. Among the various technologies involved, emphasis is placed on structural and facade systems, recognizing the significance of these systems, the separation of which in terms of their function led to modern architecture, and allowed the emergence of tall buildings. This seminar reviews contemporary design practice of tall buildings through a series of lectures and case study analyses. While most representative technologies for tall buildings are studied, particular emphasis is placed on more recent trends such as diagrid structures and double-skin facades. Further, this seminar investigates emerging technologies for tall buildings and explores their architectural potentials. Finally, this course culminates in a tall building design project and presentation. Limited enrollment. Kyoung Sun Moon

**2219b, Craft, Materials, and Digital Artistry** 3 credits. This course reviews materials and manufacturing processes especially suited for digitally crafting aesthetically unique architectural components and surfaces. Cross-fertilization of digital and conventional modes of representation and making is emphasized, as this approach often enables economically viable, highly original artistic creative expression. This is a hands-on, project-based seminar addressing fundamental theoretical issues in the transformation of ideas into material reality via representations, hand-operated tools, and CNC-automated forming devices. Limited enrollment. Kevin Rotheroe

2226b, Design Computation 3 credits. The capabilities and limitations of architects' tools influence directly the spaces architects design. Computational machines, tools once considered only more efficient versions of paper-based media, have a demonstrated potential beyond mere imitation. This potential is revealed through design computation, the creative application of the processes and reasoning underlying all digital technology, from e-mail to artificial intelligence. Just as geometry is fundamental to drawing, computation affords a fundamental understanding of how data works, which is essential to advance the development of BIM, performative design, and other emerging methodologies. This seminar introduces design computation as a means to enable architects to operate exempt from limitations of generalized commercial software; to devise problem-specific tools, techniques, and workflows; to control the growing complexities of contemporary architectural design; and to explore forms generated only by computation itself. Topics include data manipulation and translation, algorithms, information visualization, computational geometry, human-computer interaction, custom tooling, generative form-finding, emergent behavior, simulation, and system modeling. Using Processing, students develop computational toolsets and models through short, directed assignments ultimately comprising a unified, term-long project. Limited enrollment. Michael Szivos

**2230b, Exploring New Value in Design Practice** 3 credits. How do we make design a more profitable practice? Design business has traditionally positioned *building as a commodity* in the delivery supply chain, valued by clients like other products and services purchased at lowest first cost. Despite the fact that the building sector in its entirety operates in large capital pools where significant value is created, intense market competition, sole focus on differentiation by design quality, and lack of innovation in project delivery and

business models have resulted in a profession that is grossly underpaid and marginally profitable. The profession must explore new techniques for correlating the real value of an architect's services to clients and thereby break the downward pressure on design compensation. This seminar redesigns the value proposition of architecture practice, explores strategies used by better-compensated adjacent professions and markets, and investigates methods by which architects can deliver – and be paid for – the value they bring to the building industry. Prerequisite: 2031a or equivalent strongly recommended. Limited enrollment. Phillip Bernstein, John Apicella

**2234b**, Material Case Studies 3 credits. This seminar focuses on the intuition for material use in both the execution and generation of design. Students are exposed to a broad overview of the role of materials in the formation and execution of a spatial concept, as well as provided a venue for intensive work with specific materials. Structured along lines of research, experimentation, and design, the course is an intensive investigation into the relationship between a material's substance and its performance metrics and qualities. In addition to looking at materials typically used in the production of built space, the course explores whether the investigation of materials not traditionally used in architecture can further the profession. Research and discussions, in parallel, look at how material decisions affect the environment and human health. Physical material samples are used throughout the term. A site-specific, design-build spatial proposal serves as the course's final project. Limited enrollment. Emily Abruzzo

**2235a**, **Speculative Form: Methods of Discrete Computational Design** 3 credits. This course investigates nonlinear computational generative systems and their application in the manufacturing of architectural design research. Functioning as an open source research group of computational design, by concentrating primarily on Python for Rhinoceros<sub>3</sub>D, a new set of possibilities for the development of cutting-edge digital techniques is explored. The seminar tests this software in an intensive format and seeks to produce innovative intersections between explicit modeling/figuration and algorithmic formation. No previous programming experience is necessary; both introductory and advanced level students are accommodated with a series of introductory sessions, online tutorials, workshops, and lectures followed by suggested readings that gradually focus on individual projects. Students also work in pairs to design, code, and fabricate a full-scale constructed assembly. Limited enrollment. Ezio Blasetti

**2236b**, **Design/Data/Biology** 3 credits. This seminar explores the frontiers that are opening up across multiple design disciplines as a result of the ongoing revolution in biotechnology, bioinformatics, and related fields. In the first half of the course, the seminar studies the relationships that have been historically established with living systems throughout the development of architectural technology and culture. Examined are some of the critical ways in which architecture, agriculture, and urbanism have shaped our own genetics as well as those of other plant and animal species since the origins of social organization. It is within this context that the course challenges several entrenched conventions within architectural and environmental control systems design that have sought to separate built environments from the complex interdependency of surrounding ecosystems. In the second half of the course, using each student's current or prior studio work as a use case, students extend an aspect of the design intentions of the project into

a particular experimental area of interest, one that is aligned with emerging biotechnical methods, in terms of how the architecture might process either energy, water, waste, materials, or living systems in a radically different way from conventional expectations. Limited enrollment. Anna Dyson

**2299a or b, Independent Course Work** 3 or 6 credits. Program to be determined with a faculty adviser of the student's choice and submitted, with the endorsement of the study area coordinators, to the Rules Committee for confirmation of the student's eligibility under the rules. (See the School's *Academic Rules and Regulations*.)

#### ELECTIVES OUTSIDE OF SCHOOL OF ARCHITECTURE

The following courses offered elsewhere in the University may be taken for credit with permission of the instructor. Unless otherwise indicated, at the School of Architecture full-term courses are typically assigned 3 credits; half-term courses are assigned 1.5 credits.

**CPSC 100a, Introduction to Computing and Programming** Introduction to the intellectual enterprises of computer science and to the art of programming. Students learn how to think algorithmically and solve problems efficiently. Topics include abstraction, algorithms, data structures, encapsulation, resource management, security, software engineering, and web development. Languages include C, Python, SQL, and JavaScript, plus CSS and HTML. Problem sets inspired by real-world domains of biology, cryptography, finance, forensics, and gaming. See https://cs50.yale.edu for additional information. No previous programming experience required. Open to students of all levels and majors. Benedict Brown, Natalie Melo

**CPSC 112b, Introduction to Programming** Development on the computer of programming skills, problem-solving methods, and selected applications. No previous experience with computers necessary. Benedict Brown

**CPSC 527a or b, Object-Oriented Programming** Object-oriented programming as a means to efficient, reliable, modular, reusable code. Use of classes, derivation, templates, name-hiding, exceptions, polymorphic functions, and other features of C++. Michael Fischer, James Glenn

**CPSC 578a, Computer Graphics** Introduction to the basic concepts of two- and threedimensional computer graphics. Topics include affine and projective transformations, clipping and windowing, visual perception, scene modeling and animation, algorithms for visible surface determination, reflection models, illumination algorithms, and color theory. Holly Rushmeier

MGT 653a or b, The Design of Business, the Business of Design This introductory survey course sets the stage for understanding design as a catalyst in business by presenting twelve seminal design problems, across a variety of fields and industries, each highlighting the central motives – and methods – that yield successful outcomes. Each week we invite one client or designer (or client/designer team) to present a project in depth. (In some cases, we may welcome a corporate leader in conversation with a leading scholar here at Yale.) Students work independently and in teams to research and respond, the

following week, with analysis, critique, and alternate solutions. From public health to public space, retail strategy to political positioning, education to journalism to biotechnology, we want to explore how design works within complex organizations to help shape decisions, ideas, products, and more. Michael Bierut, Jessica Helfand

MGT 828b, Creativity and Innovation In this course we study the creative process and the management of this process. Our objective is to help you learn about and come to appreciate basic features of the creative process, including creative development and a number of different psychological and cultural approaches to creativity, as well as issues involved in managing creativity effectively, including leadership, managing creative people, teams and projects, creativity initiatives, and organizational response to change. How do creative ideas happen? How can we foster our creativity and the creativity of those around us? What are the paths of creative development of individuals who are successful in their creative endeavors? What are the obstacles to creativity? What is the nature of creativity in teams and organizations? These are some of the questions we address. We study creativity in many domains, including business, science and technology, the arts, and life in general, relying on a mixture of lectures, readings, and discussion. We engage in a variety of exercises, including exercises in which you explore your own creativity and group exercises in which you engage in creative activity with others. We also learn through cases, about creativity in business and how organizations foster creativity and manage creative processes. Jonathan S. Feinstein

**PSYC 637b, Minds, Brains, and Machines** Exploration of the implications that the brain is a kind of computer that gives rise to the mind. Readings combine classical and cutting-edge research in psychology, philosophy, and artificial intelligence. Julian Jara-Ettinger

#### HISTORY AND THEORY

Keller Easterling and Eeva-Liisa Pelkonen, Study Area Coordinators

This study area explores the relationship between design, history, and theory through a broad range of courses in which the analysis of buildings, cities, landscapes, and texts supports the articulation and criticism of fundamental concepts, methods, and issues. Historical and contemporary projects and writings are studied in context and as part of the theoretical discourse of architecture.

For entering M.Arch. I students who have not had significant prior architectural training, the pre-first-year visualization course (1000c) includes a broad survey of Western architectural history to the nineteenth century. For all M.Arch. I students, there is a firstyear required survey course of nineteenth- and twentieth-century architectural history (3011a) followed in the second year by a required course on architectural theory (3012b).

In addition, M.Arch. I students must satisfactorily complete two elective courses from this study area that require at least a fifteen-page research paper. With the exception of courses in which a student elects to do a project in lieu of a research paper, or courses whose descriptions specifically indicate that they do not fulfill the History and Theory elective requirement, all elective courses in this study area fulfill this requirement. Provided a fifteen-page research paper is required, the elective courses 4222a and 4223b also fulfill this History and Theory elective requirement, although those listed from the Urbanism and Landscape study area cannot be used to satisfy both the History and Theory and the Urbanism and Landscape elective requirements. Courses in other study areas as well as courses offered at the University outside of the School of Architecture that include a research paper and cover an architectural history and theory topic may fulfill the History and Theory elective requirement provided a student requests and receives permission from one of the History and Theory study area coordinators qualifying that course to fulfill the requirement. One of the two required History and Theory electives should be in a non-Western subject.

For the M.Arch. II program, there is a second-year required course dealing with issues of architecture and urbanism (3071a).

## **Required** Courses

**3011a**, **Modern Architecture** 3 credits. (Required of first-year M.Arch. I students; available as an elective for M.Arch. II and M.E.D. students.) The course embraces the last century and a half's history of architecture, when traditional fables began to yield to more scientifically conceived ideas of architecture's role in the creation of civilizations. As architecture gained importance in advancing social and industrial agendas, it also built a basis for theoretical reflection and visionary aesthetics. The expanding print and media culture accelerated the migration of ideas and propelled architecture beyond its traditional confines. Discussion of major centers of urban culture and their characteristic buildings alternates with attention to individual concepts and their impact in an increasingly interconnected culture of design. Kurt W. Forster

**3012b, Architectural Theory** 3 credits. (Required of second-year M.Arch. I students; available as an elective for M.Arch. II and M.E.D. students.) This course explores the history of Western architectural theory, from 1750 to the present, through the close reading of primary texts. Lectures place the readings in the context of architectural history; the texts are discussed in required discussion sections. Topics include theories of origin, type and character, the picturesque, questions of style and ornament, standardization and functionalism, critiques of modernism, as well as more contemporary debates on historicism, technology, and environmentalism. Marta Caldeira

**3071a, Issues in Architecture and Urbanism: Practice** 3 credits. (Required of and limited to second-year M.Arch. II students.) By investigating a broad range of projects and practitioners that have impacted the discipline of architecture, this course is designed to foster a discourse among post-professional students on the notion of practice. Aniket Shahane

**3092a or b, Independent M.E.D. Research** 3–6 credits first year, fall term; variable credits remaining terms, determined in consultation with the director of M.E.D. Studies. (Required of and limited to M.E.D. students in each term.) The proposal submitted with the admissions application is the basis for each student's study plan, which is developed in consultation with faculty advisers. Independent research is undertaken for credit each term, under the direction of a principal adviser, for preparation and completion of a written thesis. The thesis, which details and summarizes the independent research, is to be completed for approval by the M.E.D. committee by the end of the fourth term. M.E.D. faculty

#### Elective Courses

**3216b, Case Studies in Architectural Criticism** 3 credits. This seminar concentrates on issues that influence the way modern buildings and their architects are perceived by critics, scholars, and the public. The careers of such architects as Frank Lloyd Wright, Eero Saarinen, Louis Kahn, Philip Johnson, Robert Venturi, and Frank Gehry provide a framework for the examination of how patronage, fashion, social change, theory, finance, and politics affect the place of prominent designers and their work in the historical record. Readings include such critics as Lewis Mumford, Ada Louise Huxtable, Blair Kamin, Christopher Hawthorne, Michael Kimmelman, and Martin Filler. Responding to lectures by the instructor and visitors, students develop criteria for judging architectural quality (program, site, "message," details), and then apply those criteria in three brief analytical papers that build toward a fifteen-page research paper investigating the elements that contributed to the "success," "failure," or "reevaluation" of an individual building, an architect's career, or a body of architectural work. All written assignments are reviewed in individual conferences with the instructor. Limited enrollment. Carter Wiseman

**3220b, Contemporary Architectural Discourse Colloquium** 3 credits. Organized by second-year M.E.D. students in collaboration with the director of the M.E.D. program, this year's colloquium, entitled "Space and Timescales," explores the varying scales at which different disciplines intersect with the built environment. A term used by meteorologists but reinterpreted from a spatial viewpoint, timescales examine global, regional, national, city, and neighborhood scales from the perspective of economy, law, politics, science, geography, art, and spirituality. Through such a framework, this course speculates on the different impacts that result from the intersection of different combinations of time, space, and scale variables. Guest speakers are invited to participate in the discussions. Limited enrollment. Keller Easterling

**3223a, Parallel Moderns: Crosscurrents in European and American Architecture, 1880– 1940** 3 credits. This seminar puts forward the argument that what many have accepted as the mutually exclusive discourses of tradition and innovation in the modern architecture of the first half of the twentieth century – respectively identified as the "New Tradition" and the "New Pioneers" by Henry-Russell Hitchcock in two articles in *Architectural Record* in 1928, and more elaborately in his *Modern Architecture: Romanticism and Reintegration* (1929) – in fact share common genealogy and are integral to an understanding of modern architecture as a whole. Lectures by the instructor develop this argument with reference to a diverse group of architects – some well-known and others less familiar. Limited enrollment. Robert A.M. Stern

**3228a, The Autobiographical House** 3 credits. Architects and artists have long built dwellings for themselves (and for surrogate clients) as showcases of their art, as sites of collecting and teaching, and as retreats from professional life. From Thomas Jefferson to Philip Johnson, from John Soane to Eileen Gray and Frank Gehry, building a house of one's own often harks back to Renaissance models while experimenting with new manifestations of the architect's evolving role. This seminar examines key examples of buildings as well as wide-ranging readings in autobiography. Limited enrollment. Kurt W. Forster

**3265a**, Architecture and Urbanism of Modern Japan: Destruction, Continuation, and Creation 3 credits. This course examines how design philosophies and methodologies were developed in Japanese architecture during the 130-year period from the Meiji Restoration until the postmodern era. Special attention is paid to the process of urbanization through repeated destructions and the forming of cultural identity through mutual interactions with the West, both of which worked as major forces that shaped architectural developments. Highlighted architects include Chuta Ito, Goichi Takeda, Frank Lloyd Wright, Kameki Tsuchiura, Sutemi Horiguchi, Kunio Maekawa, Kenzō Tange, Arata Isozaki, Fumihiko Maki, Kisho Kurokawa, Kazuo Shinohara, Tadao Ando, and Mirei Shigemori. Historical photos and excerpts from films are used to better understand context. Students are required to make in-class presentations and write a final paper. Limited enrollment. Yoko Kawai

**3266b, Greats: China's Big Projects, 1949–1976** 3 credits. This seminar focuses on the large-scale experiments in new Chinese "building" during the tenure of Mao Zedong. Over this time span many fundamental notions of daily life – language, expression, family, education, countryside, and city – were redefined and radically tested. These new representations of culture included a paradox for architecture: how to both reflect progress while remaining place-specific. The first four weeks of the seminar ground students in the targeted sites with introduction to Yale's research collections. Over the balance of the term, primary resources from these collections and assigned readings are used to explore the particular "experiments" in modern China building and the qualities of "new" and other discourses that the campaigns of Mao's China represented. Limited enrollment. Amy Lelyveld

3272b, Exhibitionism: Politics of Display 3 credits. Since their inception in the eighteenth century, art museums - prestigious buildings commissioned by those who wield power and influence - have behaved like cultural barometers registering changing attitudes about the role cultural institutions play in society. Looking at museum buildings from the inside out, this seminar traces the evolution of this building type through an in-depth analysis of its key architectural elements: gallery, interstitial (circulation, assembly, retail) and infrastructure (security/climate control) spaces, and site. This seminar explores how the spatial and material development of these tectonic components both mirrors and perpetuates changing cultural attitudes about aesthetics, class, power, wealth, nature, leisure, gender, body, and the senses as seen through the eyes of artists, architects, critics, collectors, and politicians. Topics include gallery spectatorship from the Renaissance picture frame to the modernist white cube; shifting sites from palace to park to repurposed industrial structures; urban renewal, gentrification, and the postwar museum; starchitecture and the trophy museum; cruising: museums as social condensers to see and be seen; multimedia artistic practices and information technologies; and new typologies, such as biennials, art fairs, private collections, and retail hybrids. Limited enrollment. Joel Sanders

**3283b, After the Modern Movement: An Atlas of the Postmodern, 1945–1989** 3 credits. This course aims to answer the questions: What was and what is postmodernism in architecture? Postmodernism should not be seen as a style, but rather as a condition that arose out of the ahistorical, acontextual, self-referential, materialistic modernism

that prevailed in the post-WWII era. By pushing aside history, context, and social concerns, modernism of that period exhausted itself of its potential, and restive architects incorporated figuration and representation as they sought to make the discipline more responsive to the wide expanse of popular culture. However, postmodernism was not intended as a repudiation of modernism, but as an evolution and corrective action. The course is primarily concerned with architecture (as chronicled by Charles Jencks in his 1977 book, *The Language of Post-Modern Architecture*) and key texts by architects, such as Robert Venturi, Aldo Rossi, and James Stirling. Students explore a number of architects who have been overlooked and deserve renewed consideration. This seminar is motivated by conditions in contemporary practice, including the renewed interest in the postmodernism of the previous generation and in the return of precedent to the design process. Limited enrollment. Robert A.M. Stern

**3284a, Architectural Writing** 3 credits. The goal of this course is twofold: to introduce students to how writers have addressed and described places – buildings, terrain, built environments – and their relationships to such spaces; and through a series of assignments, using these readings as exemplary, to help students learn to write clearly about place themselves. Writing assignments include memory pieces, imaginative pieces, and descriptions of structures and landscapes in New Haven. The seminar treats the page itself as a place in which ideas about place, including current projects and proposals, can be articulated and made legible to readers both inside and outside the architectural community. Students write six essays: the first five are short (1,200 words), on a specific prompt; the last is a longer essay (2,500 words) describing and detailing a current student project. Each student shares work with the class on a weekly basis. Enrollment limited. Cynthia Zarin

**3286a, Architecture after the Rain: Theory and Design in the Post-Atomic Age** 3 credits. This seminar examines architectural, literary, and critical responses to war, threat, anxiety, and dystopia between 1945 and the present. The theories and practices of surrealism and counter-surrealism provide a foundation in the critical and psychoanalytical construction of, and influence on, post-atomic architectural practices from World War II to the present. Participants are expected to prepare a brief presentation and to conduct ongoing research into a topic of their choice, developed as an interim and final presentation and paper. Limited enrollment. Anthony Vidler

**3287b, Havana in the Twenty-First Century: The Challenges** 3 credits. This seminar covers architecture and urbanism in Havana: the old colonial city, Art Deco, the International Style, the footprint of the American presence (from the mob to nearby sugar mills), and buildings from the Cuban Revolution and the Soviet period. At the heart of the course are the main challenges facing the city's extraordinary architectural heritage. How do Cubans cope with the problems caused by the U..S embargo, now aggravated by escalating flood damage due to climate change? What are the social and environmental costs of the tourism industry, which now constitutes the mainstay of the economy? We conclude with an analysis of the architectural problems and potentials of post-Castro Havana. Students are expected to do original research to be presented in class and in the final paper. Limited enrollment. Esther da Costa Meyer

**3288b, MANY** 3 credits. A University-wide interdisciplinary seminar offered for one term only. It is designed to bring together graduate, professional, and undergraduate students to research and develop MANY – an online platform to facilitate migration through an exchange of needs. MANY rethinks cosmopolitan mobility for all those who might say, "We don't want your citizenship or your victimhood or your segregation or your bad jobs. We don't want to stay." MANY connects existing visa-sponsoring networks with spatial projects so that cities can bargain with their underexploited spaces to attract a changing influx of talent and resources – matching their needs with the needs of mobile people to generate mutual benefits. The seminar offers lectures by thinkers, authors, strategists, developers, filmmakers, policy makers, activists, and urbanists from Yale faculty and outside guests together with workshops and one final presentation/symposium, which will present the platform and its timeline for development to potential partners interested in its realization. Limited enrollment. Keller Easterling

**3289a, Bauhaus** @ 100 3 credits. In celebration of the centennial of the 1919 founding of Bauhaus in Weimar, students conduct a series of material and formal experiments that expand the physical explorations of form, color, texture, and space conducted in the legendary Vorkurs program, taught by Josef Albers from 1923 to 1933. In addition, the seminar examines the writings and works of Anni Albers, which explore the technique of weaving and the role of textiles in architecture, as well as Herbert Bayer's and László Moholy-Nagy's installations and graphic experiments as they relate to perception of space and surface. Readings of period texts mine material techniques and effects and set the conceptual apparatus of "structure," "texture," and "index" to describe them. The seminar includes field trips to the Josef and Anni Albers Foundation in Bethany and to the Museum of Modern Art in New York. The seminar concludes in an exhibition of student work in spring 2019 in the North Gallery. Limited enrollment. Katherine (Trattie) Davies, Eeva-Liisa Pelkonen

**3290a, Body Politics** 3 credits. This seminar explores the design challenges triggered by an urgent social justice issue: the imperative to create safe accessible public spaces for people of different races, genders, and disabilities. The class is organized around an indepth interrogation of five building types – public restroom, museum, office, campus, and urban street – that each have marginalized or excluded persons who fall outside white, masculine, heterosexual, able-bodied norms. First, the class situates this issue in a cultural and historical context, using case studies to look at how architectural guidelines and building codes transmit dominant cultural values and ideologies. Then, it asks students to propose alternative design strategies that allow a spectrum of different embodied people to productively mix in public space. Course requirements: student presentation and inclusive design proposal. Limited enrollment. Joel Sanders

**3299a or b, Independent Course Work** 3 or 6 credits. Program to be determined with a faculty adviser of the student's choice and submitted, with the endorsement of the study area coordinator, to the Rules Committee for confirmation of the student's eligibility under the rules. (See the School's *Academic Rules and Regulations*.)

#### ELECTIVES OUTSIDE OF SCHOOL OF ARCHITECTURE

Provided at least a fifteen-page research paper is required, the following courses offered elsewhere in the University will fulfill the History and Theory elective requirement and may be taken with the permission of the instructor. Unless otherwise indicated, at the School of Architecture full-term courses are typically assigned 3 credits; half-term courses are assigned 1.5 credits.

AFAM 379b/FREN 410b/LITR 299b, Colonial Narrative, Postcolonial Counternarrative Readings of paradigmatic, colonial era texts that have provoked responses and rewritings from postcolonial writers and filmmakers. In some cases the rewriting is explicit and direct, in other cases the response is more oblique. Both profound differences of perspective and unexpected convergences emerge. Readings may include Aimé Césaire's *A Tempest* after Shakespeare's *Tempest*, Kamel Daoud's *The Meursault Investigation* after Camus's *The Stranger*, and Claire Denis's film *Chocolat* after Ferdinand Oyono's *Houseboy*. Christopher Miller

AMST 314b/E&RM 314b/WGSS 306b, Gender and Transgender Introduction to transgender studies, an emergent field that draws on gender studies, queer theory, sociology, feminist science studies, literary studies, and history. Representations of gender nonconformity in a cultural context dominated by a two-sex model of human gender differentiation. Sources include novels, autobiographies, films, and philosophy and criticism. Greta LaFleur

ARCG 252a/CLCV 175a/HSAR 252a, Roman Architecture The great buildings and engineering marvels of Rome and its empire. Study of city planning and individual monuments and their decoration, including mural painting. Emphasis on developments in Rome, Pompeii, and central Italy; survey of architecture in the provinces. Diana Kleiner

**ARCG 581a/CLSS 890a/HSAR 581a, Roman Painting: Achievement and Legacy** Roman mural painting in all its aspects and innovations. Individual scenes and complete ensembles in palaces, villas, and houses in Rome and Pompeii are explored, as are their rediscovery and revival in the Renaissance and neoclassical period. Special attention is paid to the four architectural styles; history and mythological painting; the impact of the theater; the part played by landscape, genre, and still life; the accidental survival of painted portraiture; and the discovery and rejection of trompe l'oeil illusionism and linear perspective. Diana Kleiner

**CPLT 699b/GMAN 603b/PHIL 602b, Heidegger's** *Being and Time* A systematic, chapter-by-chapter study of Heidegger's *Being and Time*, arguably the most important work of philosophy of the twentieth century. All the major themes of the book are addressed in detail, with a particular emphasis on care, time, death, and the meaning of being. Martin Hägglund

**EALL 555b, Japanese Modernism** Japanese literature and art from the 1920s through the 1940s. The avant-garde and mass culture; popular genre fiction; the advent of new media technologies and techniques; effects of Japanese imperialism, militarism, and fascism on cultural production; experimental writers and artists and their resistance to, or complicity with, the state. Seth Jacobowitz

**ENGL 357a/LITR 426a, Feminist and Queer Theory** Historical survey of feminist and queer theory from the Enlightenment to the present, with readings from key British, French, and American works. Focus on the foundations and development of contemporary theory. Shared intellectual origins and concepts, as well as divergences and conflicts, among different ways of approaching gender and sexuality. Jill Richards

FILM 842b/HSAR 712b, Approaches to the Urban Screen What distinguishes the urban screen - in terms of spatiality, economics, phenomenology, and technology - from other screens proliferating today? The course aims to think genealogically about the emergence and descent of large-scale urban screens as forms of public display and as new metropolitan interfaces. Today we are witnessing long-standing conceptions of the screen as a surface for the play of representations ceding ground to ecological understandings of the screen as an environmentally embedded node and as a point of dynamic mediation between actors and the world. Considering materials from film history, architectural history, art history, and urban history, the seminar considers the urban screen as a crucial part of the broader redefinition of the screen. Urban screens can be understood in terms of a rupture and recovery of screen history, wherein the fracturing of the screen (as movie screen) is coextensive with the recovery of older and alternate understandings of the screen (as facade, as protection, as shelter, as furniture, as filter, as masquerade, as control mechanism). A key aspect of the seminar is to work through the existing frameworks for thinking about urban screens and to propose new approaches that might shape this nascent area of study. In revisiting alternate histories of the screen, the course explores emerging screen cultures and their implications for the future of screen studies. Field trips to the Yale Art Gallery, Yale Center for British Art, Peabody Museum, and Beinecke Library. Francesco Casetti, Craig Buckley

**HSAR 521a, Art and Colonialism** This course investigates the role of art in colonial projects and the impact of colonialism on art. It analyzes in particular the ways in which colonialism shaped visual and material cultures and environments in Latin America and Africa from the early modern period to the present. It is organized around three themes: colonization and the birth of the museum, the role of art in the colonial project, and world art in the postcolonial era. Cécile Fromont

**HSAR 652a, Documenting the World** This seminar explores the significance of the documentary survey in Europe and the Middle East. Writing the history of the world can only be undertaken from a particular ideological point of view; for example, although medieval illustrated manuscripts, such as the *Compendium of History* of Rashid al-Din (1304) and the *Travels of Sir John Mandeville* (ca. 1371), were concerned with situating the reader within the context of religious and political authority, during the eighteenth century the attempt was made to document the world through scientific explorations of race, religion, and geography, as exemplified by the magnum opus *Ceremonies and Customs of the World Religions*, by Bernard and Picart (1727–31). This seminar studies original and facsimile copies of manuscripts at Yale libraries. Kishwar Rizvi

HSAR 674b, The History of Color, 1400–2000 This seminar looks at the vexed history of color in all of its aspects, from the Renaissance to the present. Divided between *colore/coloris*, and frequently opposed to *disegno/dessin*, color has often been

relegated to second place and to the status of supplement, derogatorily associated with the superficial, the ephemeral, the deceptive, the illusory, the artificial, and the feminine. At the same time, it has been understood as the "difference" of painting, it is the essence of "what painting is" from a material and practical point of view, it has been at the heart of the *paragone* debates, and it has been a linchpin of modern and modernist art and theory. This course looks at the history of thought about color in a variety of areas: the alchemical and chemical; the practical and the theoretical; the science of optics; discourse, rhetoric, poetics, and philosophy. Writers addressed include Cennino Cennini and other authors of artist's manuals; Roger de Piles, Sir Isaac Newton, and Johann Wolfgang van Goethe; Charles Baudelaire, Michel Eugène Chevreul, and Josef Albers; Rainer Maria Rilke and Ludwig Wittgenstein. Artists considered include Titian, Peter Paul Rubens, and Jean-Antoine Watteau; Eugène Delacroix, J.M.W. Turner, Edouard Manet, and the Impressionists; Georges Seurat and Paul Cézanne; Henri Matisse, Helen Frankenthaler, and the color-field painters. Carol Armstrong, Nicola Suthor

HSAR 753a, Theories of Imagination and Visual Perception This seminar traces the role of imagination and visual perception as conceived by philosophers, phenomenologists, perceptual psychologists, and other theorists in mainly Western thought since the seventeenth century. The ways in which perception and imagination are conceived together are informed by changing conceptions of each term. "Imagination" can be seen as a mental power of internal image making that must be considered separately from perception, or it may be considered as an indispensable component of perception, which itself can be conceived as a more or less faithful representation or a creative process. Readings are chosen from among the works of John Locke, Immanuel Kant, Hippolyte Taine, Hermann von Helmholtz, Henri Bergson, Jean Piaget, Maurice Merleau-Ponty, and others. The significance of the discourse for art and literature is stressed. Students make presentations and submit papers on topics of their choosing in consultation with the instructor. Qualified undergraduates are welcome. Margaret Olin

**HSAR 8144, Japan's Global Baroque** The intersection of art, science, and diplomacy at Kyoto and Nagasaki in the time of Japanese, Portuguese, Spanish, and Dutch cultural and mercantile interaction in the sixteenth and seventeenth centuries, with attention to the entangled political relations linking the shogun Toyotomi Hideyoshi, Philip II of Spain, Jesuit missionaries such as Alessandro Valignano, and the Christian *daimyō* of Kyushu and the Inland Sea. Focus on Japanese castle architecture, *nanban* screens, world maps, *arte sacra*, and tea ceremony practices as related to the importation of European *arte sacra*, prints and drawings, scientific instruments, and world atlases such as *Theatrum Orbis Terrarum*. Includes inquiry into back-formations such as "baroque" and "global" to describe and/or interpret sixteenth- and seventeenth-century cultural productions. Mimi Hall Yiengpruksawan

**HUMS 444b, The City of Rome** An interdisciplinary study of Rome from its legendary origins through its evolving presence at the crossroads of Europe and the world. Exploration of the city's rich interweaving of history, theology, literature, philosophy, and the arts in significant moments of Roman and world history. Virginia Jewiss

#### URBANISM AND LANDSCAPE

Alan Plattus and Elihu Rubin, Study Area Coordinators

In this study area, a broad range of courses explore the aesthetic, economic, social, and political influences on the spatial form of urban places and the urban, suburban, and rural landscapes that form our design ecology.

For the M.Arch. I program, required courses in this study area include an introduction to planning and development (4021a) and the satisfactory completion of one of the elective seminar courses from this study area. Courses offered outside the School not listed below may fulfill this elective requirement provided permission from the study area coordinators has been granted.

## **Required** Course

**4021a**, **Introduction to Planning and Development** 3 credits. (Required of second-year M.Arch. I students.) This course demonstrates the ways in which financial and political feasibility determine the design of buildings and the character of the built environment. Students propose projects and then adjust them to the conflicting interests of financial institutions, real estate developers, civic organizations, community groups, public officials, and the widest variety of participants in the planning process. Subjects covered include housing, commercial development, zoning, historic preservation, parks and public open space, suburban subdivisions, and comprehensive plans. Alexander Garvin

## Elective Courses

4221a, Introduction to Commercial Real Estate 3 credits. This seminar introduces commercial real estate. It does not require any prior knowledge of finance, accounting, or taxation policies. Commercial real estate is income-producing property that is built, financed, and sold for investment. This course examines five basic types of commercial real estate (office, industrial, retail, multifamily, and hotel) from the standpoints of the developer, lender, and investor. Principles of location, financing, timing of market cycles, leasing, ownership structure, and external factors are explored. Students are expected to evaluate assets, partnership interests, and other positions such as debtor interests through valuation measurement, which requires the use of some simple mathematics. An HP-12C calculator or laptop computer with Excel for use in class is required. Students also examine commercial deeds, leases, partnership agreements, and other legal documents. Each student selects a building or development site within New Haven County for a due diligence analysis of zoning, real estate taxes, deeds, liens, market supply and demand, projected income and expenses, and availability of debt. In addition to outof-class assignments, a brief exercise is included during each class. Limited enrollment. Kevin D. Gray

**4222a, History of Landscape Architecture: Antiquity to 1700 in Western Europe** 3 credits. This course presents an introductory survey of the history of gardens and the interrelationship of architecture and landscape architecture in Western Europe from antiquity to 1700, focusing primarily on Italy. The course examines chronologically the evolution of several key elements in landscape design: architectural and garden typologies; the

boundaries between inside and outside; issues of topography and geography; various uses of water; organization of plant materials; and matters of garden decoration, including sculptural tropes. Specific gardens or representations of landscape in each of the four periods under discussion – Ancient Roman, medieval, early and late Renaissance, and Baroque – are examined and situated within their own cultural context. Throughout the seminar, comparisons of historical material with contemporary landscape design are emphasized. Limited enrollment. Bryan Fuermann

**4223b, History of British Landscape Architecture: 1500 to 1900** 3 credits. This seminar examines chronologically the history of landscape architecture and country-house architecture in Britain from 1500 to 1900. Topics of discussion include the history of the castle in British architecture and landscape architecture; Italian and French influences on the seventeenth-century British garden; military landscaping; the Palladian country house and British agricultural landscape; Capability Brown's landscape parks; theories of the picturesque and of the landscape sublime; Romanticism and the psychology of nature; the creation of the public park system; arts and crafts landscape design; and the beginnings of landscape modernism. Comparisons of historical material with contemporary landscape design, where appropriate, are made throughout the term. The collection of the Yale Center for British Art is used for primary visual material, and a trip to England over spring break, partially funded by the School, allows students to visit firsthand the landscape parks studied in this seminar. Limited enrollment. Bryan Fuermann

4226b/F&ES 888b, Ecological Urban Design 3 credits. This course lays the groundwork for students from the School of Architecture and the School of Forestry & Environmental Studies to collaboratively explore and define ecologically driven urban design. The goal is to work as an interdisciplinary group to cultivate a perspective on the developing field of urban ecology and approaches to implementing urban ecological design. The transformation of urban ecology from a role in studying a system to studying and shaping urban ecosystems is a primary focus for the course, which concentrates on the following questions: How do we define urban ecosystems? How do we combine science, design, and planning to shape and manage urban ecosystems? How do we implement effective and adaptable experimental and monitoring methods specific to urban sites and human subjects in order to conduct viable urban ecological research? The course uses the Earth Stewardship Initiative, a large land-planning project developed for the Ecological Society of America in Sacramento, Calif., to create a real-world project where interdisciplinary teams can work to combine ecological applications and design with the goal of shaping urban systems to improve the ecological, social, and infrastructural function of city components. Limited enrollment. Alexander Felson

**4233b**, **Ghost Towns** 3 credits. This is an advanced, interdisciplinary seminar in architectural history, urban planning, vernacular building, the politics of preservation, collective memory, tourism, and, ultimately, urban sustainability. Looking at a broad spectrum of failed or almost-failed cities in the United States and across the globe, this seminar uses the ghost town and its rhythms of development and disinvestment to establish a conceptual framework for contemporary urban patterns and processes. Students develop skills in urban and architectural research methods, visual and formal analysis, effective writing, and critical reasoning. Limited enrollment. Elihu Rubin

**4240b**, **Landscapes of Fulfillment:** Architecture and Urbanism of Contemporary **Logistics** 3 credits. This seminar explores the ways in which the logistics industry is transforming the built environment. Once the domain of the industrial engineer or the quartermaster, logistics now affects increasingly large areas of everyday life, including significant aspects of architecture and urbanism. Through readings, discussions, and case studies, the seminar examines the historical and theoretical sources of logistics before looking more closely at a series of corporate actors that define themselves through logistics in significant ways, including Walmart, Amazon, IKEA, and Tesla. Through these discussions, the seminar engages debates related to infrastructure, automation, mobility, policy, publicness, labor, and aesthetics. The work of this course includes both visual and textual analysis as well as written and graphic production. Participants in the seminar develop an archive, a research paper, and original visualizations that investigate a contemporary logistical actor or technology. Limited enrollment. Jesse LeCavalier

**4291c, The Urban Atlas: Morphology, Typology, and Thick Space** 3 credits. This program, based in the collaboration between the Yale School of Architecture and the Architecture Department at Chalmers University of Technology in Gothenburg, Sweden, introduces Yale students to the rigorous study of urban form and space and their social uses in relation to the context of historic and contemporary architecture and urbanism in the north of Europe. During an intensive monthlong residency in Gothenburg, Yale students learn and practice methods and techniques of urban analysis, including graphic and modeling approaches to understanding the interface between building form and typology and larger patterns of urban use and movement. Students live, travel, and work together as an integrated research team, contributing to a new Urban Atlas of North European cities. Alan Plattus, Andrei Harwell

**4299a or b, Independent Course Work** 3 or 6 credits. Program to be determined with a faculty adviser of the student's choice and submitted, with the endorsement of the study area coordinator, to the Rules Committee for confirmation of the student's eligibility under the rules. (See the School's *Academic Rules and Regulations*. Available for credit to fulfill the M.Arch. I Urbanism and Landscape elective requirement with the approval of the study area coordinators.)

#### ELECTIVES OUTSIDE OF SCHOOL OF ARCHITECTURE

The following courses offered elsewhere in the University will fulfill the Urbanism and Landscape elective requirement and may be taken for credit with the permission of the instructor. Unless otherwise indicated, at the School of Architecture full-term courses are typically assigned 3 credits; half-term courses are assigned 1.5 credits.

**AFAM 584b/SOCY 584b, Inequality, Race, and the City** Urban inequality in America. The racial iconography of the city is explored and represented, and the dominant cultural narrative of civic pluralism is considered. Topics of concern include urban poverty, race relations, ethnicity, class, privilege, education, social networks, social deviance, and crime. Elijah Anderson

AMST 622a/623b/CPLT 622a/822b, Working Group on Globalization and Culture A continuing yearlong collective research project, a cultural studies "laboratory." The group, drawing on several disciplines, meets regularly to discuss common readings, develop collective and individual research projects, and present that research publicly. The general theme for the working group is globalization and culture, with three principal aspects: (1) the globalization of cultural industries and goods, and its consequences for patterns of everyday life as well as for forms of fiction, film, broadcasting, and music; (2) the trajectories of social movements and their relation to patterns of migration, the rise of global cities, the transformation of labor processes, and forms of ethnic, class, and gender conflict; (3) the emergence of and debates within transnational social and cultural theory. The specific focus, projects, and directions of the working group are determined by the interests, expertise, and ambitions of the members of the group, and change as its members change. There are a small number of openings for second-year graduate students. Michael Denning

**ANTH 406a/EVST 424a/PLSC 420a, Rivers: Nature and Politics** The natural history of rivers and river systems and the politics surrounding the efforts of states to manage and engineer them. James Scott

ANTH 575b/EAST 575b, Hubs, Mobilities, and Global Cities Analysis of urban life in historical and contemporary societies. Topics include capitalist and postmodern transformations, class, gender, ethnicity, migration, and global landscapes of power and citizenship. Helen Siu

EVST 292a/GLBL 217a/PLSC 149a, Sustainability in the Twenty-First Century: Environment, Energy, and the Economy Sustainability as a guiding concept for addressing twenty-first-century tensions between economic, environmental, and social progress. Using a cross-disciplinary set of materials from the "sustainability canon," students explore the interlocking challenges of providing abundant energy, reducing pollution, addressing climate change, conserving natural resources, and mitigating the other impacts of economic development. Daniel Esty

**F&ES 530a, Ecosystems and Landscapes** This Foundations course is an introduction to concepts in ecosystem and landscape ecology. Topics covered include element cycling, food web interactions, species-area relationships, whole system metabolism, models of biodiversity, etc. The course emphasizes how to integrate knowledge to understand ecological patterns and processes at multiple scales in order to study, manage, and conserve species and ecosystems. Mark A. Bradford

**F&ES 627b, Environmental Law** This course explores what environmental laws are, who they are for, and how they can be used. It addresses federal statutes, like the Clean Air Act and the Civil Rights Act, as well as common law, tribal law, and international law. It seeks to understand those who write environmental laws, those who wield them, and those who are subject to them. Grades are based on three written assignments and student participation; there is no examination option. Enrollment limited. Douglas A. Kysar

**F&ES 710b, Coastal Governance** Effective governance combines a basic understanding of natural systems with human values to create new coastal institutions. Single-use regulations of the past (energy, wastewater, ports, marsh conservation) are being replaced by more holistic thinking (spatial management and/or ecosystem-based management). To understand the state of this transition, policy analysis frameworks are applied to sector-based and ecosystem-based management initiatives. Term projects allow student teams to consider the merit of various alternatives that they create to address contemporary problems, which have included sea-level rise, hurricane damage, fisheries, and management in developing countries. Three hours seminar; term project. Enrollment limited to eighteen. F&ES 515 and F&ES 525 or equivalent knowledge recommended. Richard Burroughs

**F&ES 716b, Renewable Energy** Introduction to renewable energy, including physical principles, existing and emerging technologies, and interaction with the environment. Energy demand; transmission and storage; generation by hydroelectric, wind, solar, biofuel, and geothermal sources, as well as waves and tidal generation. Includes field trips to conventional, hydroelectric, and wind-power facilities in Connecticut. Prerequisites: high school physics, chemistry, and mathematics; college-level science, engineering, and mathematics recommended. Ronald B. Smith

**F&ES 755b, Modeling Geographic Space** An introduction to the conventions and capabilities of image-based (raster) geographic information systems (GIS) for the analysis and synthesis of spatial patterns and processes. In contrast to F&ES 756, the course is oriented more toward the qualities of geographic space itself (e.g., proximity, density, or interspersion) than the discrete objects that may occupy such space (e.g., water bodies, land parcels, or structures). Three hours lecture, problem sets. No previous experience is required. C. Dana Tomlin

**F&ES 756a, Modeling Geographic Objects** This course offers a broad and practical introduction to the nature and use of drawing-based (vector) geographic information systems (GIS) for the preparation, interpretation, and presentation of digital cartographic data. In contrast to F&ES 755, the course is oriented more toward discrete objects in geographical space (e.g., water bodies, land parcels, or structures) than the qualities of that space itself (e.g., proximity, density, or interspersion). Three hours lecture, problem sets. No previous experience is required. C. Dana Tomlin

**F&ES 799b, Sustainable Development Goals and Implementation** This course has students (working alone or in a small group) design a specific implementation plan for a specific country for a specific item that is part of the Sustainable Development Goals adopted by the UN in September 2015. Students study the new post-2015 sustainable development goals and their implementation in the real world. The course focuses primarily on understanding and developing the ability to effectively apply a variety of tools and means of implementation, relying primarily on guest lecturers. The aim is for each student or group of students to combine a geographic area/region (for example, a country of key interest), a sustainable development goal, and a tool for implementation to design an effective implementation strategy to present to those at the ministerial and decision-making level. Gordon T. Geballe

**F&ES 817a, Urban, Suburban, and Regional Planning Practice** Our cities, towns, and regions represent the cumulative impact of planning policies implemented at multiple scales over the past century. This course explores the dynamic trends facing the United States and its communities and the evolution in planning practice that is occurring at the

local and regional scale to address them. It looks at both suburban and urban approaches. The recent deep recession, climate change, and a lack of social cohesion call for a new triple bottom-line approach to decision-making for our future. Existing policies and governance structures are not always well suited for the new challenges and opportunities that we face. Local, state, and the national government are, to varying degrees, crafting new solutions to the challenges of urban and suburban America. David Kooris

MGT 536a, Urban Poverty and Economic Development This term-long course provides an examination of current theory, research, and policy on urban poverty and community development in the United States as a background for developing community wealth-building economic development interventions in city and community settings. Topics include: (1) measurements and theoretical explanations of poverty, incorporating both panel data and ethnography; (2) analytic tools for assessing community and regional economic flows; and (3) strategies for economic development and wealth building among the low-income urban populations and communities. We examine innovative approaches in the traditional areas of economic development practice areas of business creation and development, workforce development and skills training, housing, education, and individual income support and wealth building. Strategies to explore include place-based anchor strategies, development through local food hubs, sector strategies for workforce development training, worker ownership, affordable housing and community land trusts, community development banks and credit unions, micro enterprise and asset-building strategies. The course is designed to give students both a broad overview of theory, research, policy, and current trends in urban poverty and community development through readings, guest lectures, and case-based discussions, and the opportunity to self-direct their exploration of an aspect of the economic development literature covered in the course literature more deeply. Kate M. Cooney

MGT 849a, Cases in Commercial Real Estate Real estate is the space defined and created for human needs. The physical experience of living spaces, working spaces, shopping spaces, municipal spaces, transportation spaces, and religious spaces all began with entrepreneurial visions and plans, and they continue to evolve as society's needs evolve. Real estate involves complex financing, construction, and coordination across time, space, and parties with multiple interests. In this course we explore real estate through a mixture of current and past cases designed to engage students in salient examples of property investment. We focus particularly on commercial property. Students are challenged to look at each case through multiple lenses: economic, strategic, legal, aesthetic, social, risk, financial, and cultural. The course demands quantitative (e.g., spreadsheet) as well as contextual analysis. Each class meeting focuses on a different multi-perspective case. Some of these are very current, others are from past (and historical) property cycles. For students interested in case development for the course, RA opportunities to research and contribute to cases are available via the International Center for Finance. The course depends critically on conscientious case preparation and alert, in-class participation. Attendance at every class is required. Real estate lends itself to the case method, as virtually every subject requires quantitative analyses, judgment calls, and a practical action plan. Cold calling is done throughout the class. William N. Goetzmann, Jessica Helfand

MGT 895a, International Real Estate This half-term course provides an introduction to real estate development, investment, finance, and strategy outside of the United States. Global investment in financial assets, the need for risk diversification, the increased accuracy of property records, greater transparency, more relaxed laws permitting foreign investment, and population movement around the world-all of these trends have led to a tremendous increase in cross-border real estate investing for both private equity and public companies. While many studies of international real estate focus on the role of foreign real property in the U.S. institutional portfolio, this course takes a wider and more historical view of the cultural attitudes toward real estate around the world and how they impact the quality and risk of investment assets. Detailed analysis begins with property-level due diligence in order to provide a fundamental understanding of how and why property markets differ by country beyond simple supply/demand dynamics. This course consists of three parts: (1) a micro-market analysis of real property characteristics in various countries around the world, including financing, leasing, and valuation; (2) an analysis of investment vehicles - public and private - available to institutional investors, as well as cross-border transactions; and (3) a macro-market view of world space and capital markets, the rationale for international investing, trends in capital flows and portfolio composition, and the various ways in which risk is measured and mitigated. Each part of the course requires a brief individual assignment completed over a two-week period. The first research project is a study of a significant real property asset outside of the United States, including its market, ownership, legal structure, valuation, and transaction history. Both the G-7 and G-20 nations will be the object of study, but individual students are free to concentrate on any country of interest. The second research project consists of an analysis of a private equity or publicly traded foreign property company, its current fair value, competitive advantage, and future prospects. An interview with a top executive of a company will be encouraged and facilitated. The third research project consists of a comparative analysis of world property markets and the hypothetical investment in a portfolio of real estate assets across three or more foreign property markets. The course consists of lectures, discussion, case studies, and readings on international real estate from a variety of sources. No final exam or group project is required. Kevin Gray

**MGT 899b, Real Estate Finance for Institutional Investors** This course concentrates on the five major types of institutional property investment: Office, Industrial, Retail, Hotel and Multifamily, and large-sized properties (>\$50M). Each session deals with the unique financial characteristics of a particular property type, via case study, modeling of cash flows, and income and expense analysis. The special market characteristics of each property type, buying, selling, and current market conditions are also discussed. Because real estate can also be analyzed from the viewpoint of public and private markets and debt and equity markets, each session includes a discussion of a financing or equity vehicle and its relevance to a particular property type. In addition to case studies that require problem solving, students are expected to be able to model and value different property types; read and abstract leases and partnership agreements; and understand, quantify, and articulate the differing perspectives of investor/buyer, developer/seller, and lender/ syndicator. As appropriate, guest speakers are introduced for the final forty-five minutes of at least half the sessions. A final team project requires working in groups of three to five students on the same portfolio of diverse real estate assets, with recommendations to be made to an investor group at the final class. Kevin Gray

**PLSC 656a/GLBL 579a, Global Governance** Examination of global policy problems, the acceleration of interdependence, and the role, potential, and limits of the institutions of global governance to articulate collective interests and to work out cooperative problemsolving arrangements. Consideration of gaps in global governance and controversies between globalization and state sovereignty, universality, and tradition. Yuriy Sergeyev

## The Work of Yale University

The work of Yale University is carried on in the following schools:

Yale College Est. 1701. Courses in humanities, social sciences, natural sciences, mathematical and computer sciences, and engineering. Bachelor of Arts (B.A.), Bachelor of Science (B.S.).

For additional information, please visit https://admissions.yale.edu, e-mail student. questions@yale.edu, or call 203.432.9300. Postal correspondence should be directed to Office of Undergraduate Admissions, Yale University, PO Box 208234, New Haven CT 06520-8234.

**Graduate School of Arts and Sciences** Est. 1847. Courses for college graduates. Master of Advanced Study (M.A.S.), Master of Arts (M.A.), Master of Science (M.S.), Master of Philosophy (M.Phil.), Doctor of Philosophy (Ph.D.).

For additional information, please visit https://gsas.yale.edu, e-mail graduate. admissions@yale.edu, or call the Office of Graduate Admissions at 203.432.2771. Postal correspondence should be directed to Office of Graduate Admissions, Yale Graduate School of Arts and Sciences, PO Box 208236, New Haven CT 06520-8236.

School of Medicine Est. 1810. Courses for college graduates and students who have completed requisite training in approved institutions. Doctor of Medicine (M.D.). Post-graduate study in the basic sciences and clinical subjects. Five-year combined program leading to Doctor of Medicine and Master of Health Science (M.D./M.H.S.). Combined program with the Graduate School of Arts and Sciences leading to Doctor of Medicine and Doctor of Philosophy (M.D./Ph.D.). Master of Medical Science (M.M.Sc.) from the Physician Associate Program and the Physician Assistant Online Program.

For additional information, please visit https://medicine.yale.edu/education/ admissions, e-mail medical.admissions@yale.edu, or call the Office of Admissions at 203.785.2643. Postal correspondence should be directed to Office of Admissions, Yale School of Medicine, 367 Cedar Street, New Haven CT 06510.

**Divinity School** Est. 1822. Courses for college graduates. Master of Divinity (M.Div.), Master of Arts in Religion (M.A.R.). Individuals with an M.Div. degree may apply for the program leading to the degree of Master of Sacred Theology (S.T.M.).

For additional information, please visit https://divinity.yale.edu, e-mail div. admissions@yale.edu, or call the Admissions Office at 203.432.5360. Postal correspondence should be directed to Admissions Office, Yale Divinity School, 409 Prospect Street, New Haven CT 06511.

Law School Est. 1824. Courses for college graduates. Juris Doctor (J.D.). For additional information, please visit https://law.yale.edu, e-mail admissions.law@yale.edu, or call the Admissions Office at 203.432.4995. Postal correspondence should be directed to Admissions Office, Yale Law School, PO Box 208215, New Haven CT 06520-8215.

Graduate Programs: Master of Laws (LL.M.), Doctor of the Science of Law (J.S.D.), Master of Studies in Law (M.S.L.). Doctor of Philosophy (Ph.D.) awarded by the Graduate School of Arts and Sciences. For additional information, please visit https:// law.yale.edu, e-mail gradpro.law@yale.edu, or call the Graduate Programs Office at 203.432.1696. Postal correspondence should be directed to Graduate Programs, Yale Law School, PO Box 208215, New Haven CT 06520-8215.

School of Engineering & Applied Science Est. 1852. Courses for college graduates. Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) awarded by the Graduate School of Arts and Sciences.

For additional information, please visit https://seas.yale.edu, e-mail grad.engineering @yale.edu, or call 203.432.4252. Postal correspondence should be directed to Office of Graduate Studies, Yale School of Engineering & Applied Science, PO Box 208267, New Haven CT 06520-8267.

**School of Art** Est. 1869. Professional courses for college and art school graduates. Master of Fine Arts (M.F.A.).

For additional information, please visit http://art.yale.edu, e-mail artschool.info@ yale.edu, or call the Office of Academic Administration at 203.432.2600. Postal correspondence should be directed to Office of Academic Administration, Yale School of Art, PO Box 208339, New Haven CT 06520-8339.

**School of Music** Est. 1894. Graduate professional studies in performance, composition, and conducting. Certificate in Performance, Master of Music (M.M.), Master of Musical Arts (M.M.A.), Artist Diploma (A.D.), Doctor of Musical Arts (D.M.A.).

For additional information, please visit https://music.yale.edu, e-mail gradmusic. admissions@yale.edu, or call the Office of Admissions at 203.432.4155. Postal correspondence should be directed to Yale School of Music, PO Box 208246, New Haven CT 06520-8246.

School of Forestry & Environmental Studies Est. 1900. Courses for college graduates. Master of Forestry (M.F.), Master of Forest Science (M.F.S.), Master of Environmental Science (M.E.Sc.), Master of Environmental Management (M.E.M.). Doctor of Philosophy (Ph.D.) awarded by the Graduate School of Arts and Sciences.

For additional information, please visit https://environment.yale.edu, e-mail fesinfo@yale.edu, or call the Office of Admissions at 800.825.0330. Postal correspondence should be directed to Office of Admissions, Yale School of Forestry & Environmental Studies, 195 Prospect Street, New Haven CT 06511.

School of Public Health Est. 1915. Courses for college graduates. Master of Public Health (M.P.H.). Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) awarded by the Graduate School of Arts and Sciences.

For additional information, please visit https://publichealth.yale.edu, e-mail ysph. admissions@yale.edu, or call the Admissions Office at 203.785.2844.

School of Architecture Est. 1916. Courses for college graduates. Professional and postprofessional degree: Master of Architecture (M.Arch.); nonprofessional degree: Master of Environmental Design (M.E.D.). Doctor of Philosophy (Ph.D.) awarded by the Graduate School of Arts and Sciences.

For additional information, please visit https://architecture.yale.edu, e-mail gradarch. admissions@yale.edu, or call 203.432.2296. Postal correspondence should be directed to the Yale School of Architecture, PO Box 208242, New Haven CT 06520-8242.

**School of Nursing** Est. 1923. Courses for college graduates. Master of Science in Nursing (M.S.N.), Post Master's Certificate, Doctor of Nursing Practice (D.N.P.). Doctor of Philosophy (Ph.D.) awarded by the Graduate School of Arts and Sciences.

For additional information, please visit https://nursing.yale.edu or call 203.785.2389. Postal correspondence should be directed to Yale School of Nursing, Yale University West Campus, PO Box 27399, West Haven CT 06516-0974.

**School of Drama** Est. 1925. Courses for college graduates and certificate students. Master of Fine Arts (M.F.A.), Certificate in Drama, Doctor of Fine Arts (D.F.A.).

For additional information, please visit https://drama.yale.edu, e-mail ysd.admissions @yale.edu, or call the Registrar/Admissions Office at 203.432.1507. Postal correspondence should be directed to Yale School of Drama, PO Box 208325, New Haven CT 06520-8325.

**School of Management** Est. 1976. Courses for college graduates. Master of Business Administration (M.B.A.), Master of Advanced Management (M.A.M.), Master of Management Studies (M.M.S.). Doctor of Philosophy (Ph.D.) awarded by the Graduate School of Arts and Sciences.

For additional information, please visit https://som.yale.edu. Postal correspondence should be directed to Yale School of Management, PO Box 208200, New Haven CT 06520-8200.

# Travel Directions

to Yale University School of Architecture Administrative Offices Paul Rudolph Hall (formerly Art & Architecture Building), 180 York Street, 3rd Floor

#### By Air

Tweed-New Haven Airport is served by American Airlines. From Tweed-New Haven Airport, take taxi (Metro Cab, 203.777.7777) to 180 York Street. From New York City airports (Kennedy, LaGuardia, and Newark) and Hartford airport (Bradley), take Go Airport Shuttle (866.284.3247) to the Study at Yale and walk to 180 York Street (corner of York and Chapel streets); or take Connecticut Limousine Service (800.472.5466) to their New Haven terminal. From Connecticut Limousine terminal, take taxi (Metro Cab, 203.777.7777) to 180 York Street (corner of York and Chapel streets).

#### By Train

Take Amtrak or Metro-North to New Haven. From the New Haven train station take a taxi to 180 York Street (corner of York and Chapel streets).

#### By Car

Interstate 95 (from New York or Boston)

Take Downtown New Haven Exit 47 (Route 34). Proceed to Exit 1 (North Frontage Road). At the third traffic light turn right onto York Street. Proceed three blocks to the corner of York and Chapel streets. Parking facilities are located on York Street between Crown and Chapel streets. Rudolph Hall is on the northwest corner of York and Chapel streets.

Interstate 91 (from points north or west) Take Downtown New Haven Exit 1 (Route 34). Proceed to Exit 1 (North Frontage Road). Continue as above.

#### YALE UNIVERSITY CAMPUS NORTH



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The University is committed to basing judgments concerning the admission, education, and employment of individuals upon their qualifications and abilities and affirmatively seeks to attract to its faculty, staff, and student body qualified persons of diverse backgrounds. In accordance with this policy and as delineated by federal and Connecticut law, Yale does not discriminate in admissions, educational programs, or employment against any individual on account of that individual's sex, race, color, religion, age, disability, status as a protected veteran, or national or ethnic origin; nor does Yale discriminate on the basis of sexual orientation or gender identity or expression.

University policy is committed to affirmative action under law in employment of women, minority group members, individuals with disabilities, and protected veterans.

Inquiries concerning these policies may be referred to Valarie Stanley, Director of the Office for Equal Opportunity Programs, 221 Whitney Avenue, 4th Floor, 203.432.0849. For additional information, see https://equalopportunity.yale.edu.

Title IX of the Education Amendments of 1972 protects people from sex discrimination in educational programs and activities at institutions that receive federal financial assistance. Questions regarding Title IX may be referred to the University's Title IX Coordinator, Stephanie Spangler, at 203.432.4446 or at titleix@yale.edu, or to the U.S. Department of Education, Office for Civil Rights, 8th Floor, 5 Post Office Square, Boston MA 02109-3921; tel. 617.289.0111, fax 617.289.0150, TDD 800.877.8339, or ocr.boston@ed.gov.

In accordance with federal and state law, the University maintains information on security policies and procedures and prepares an annual campus security and fire safety report containing three years' worth of campus crime statistics and security policy statements, fire safety information, and a description of where students, faculty, and staff should go to report crimes. The fire safety section of the annual report contains information on current fire safety practices and any fires that occurred within on-campus student housing facilities. Upon request to the Office of the Vice President for Human Resources and Administration, PO Box 208322, 2 Whitney Avenue, Suite 810, New Haven CT 06520-8322, 203.432.8049, the University will provide this information to any applicant for admission, or prospective students and employees may visit http://publicsafety.yale. edu.

In accordance with federal law, the University prepares an annual report on participation rates, financial support, and other information regarding men's and women's intercollegiate athletic programs. Upon request to the Director of Athletics, PO Box 208216, New Haven CT 06520-8216, 203.432.1414, the University will provide its annual report to any student or prospective student. The Equity in Athletics Disclosure Act (EADA) report is also available online at http://ope.ed.gov/athletics.

Applications are submitted online. For all other matters related to admission to the School of Architecture, please telephone the Office of Admissions, 203.432.2296.

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