Twin Cities Campus

Architecture M.Arch.
School of Architecture
College of Design

Link to a list of faculty for this program.

Contact Information:
School of Architecture, College of Design, University of Minnesota, 145 Rapson Hall, 89 Church Street S.E., Minneapolis, MN 55455
(612-624-7866; fax: 624-5743)
Website: http://arch.design.umn.edu

- Program Type: Master's
- Requirements for this program are current for Fall 2011
- Length of program in credits: 90
- This program does not require summer semesters for timely completion.
- Degree: Master of Architecture

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

Architecture encompasses the making and study of the buildings and environments that we inhabit. The concerns of architecture involve a wide variety of areas of study, including the art of representing built projects through drawings and computer graphics; the technology of building structure, building materials, and natural and mechanical systems; the history, theory, and art of making, using, and understanding buildings as cultural artifacts for human use; and the practice of architecture in the context of sustainable environmental systems, urban form, and business economics.

The School of Architecture offers one accredited professional degree, the master of architecture (M.Arch.), and three non-professional research degrees, the master of science (M.S.) in architecture, including a sustainable design track or concentrations in heritage conservation and preservation or metropolitan design.

The master of architecture degree is the accredited three-year professional program that prepares students for licensure and practice in the discipline of architecture as a speculative, analytic, and investigative endeavor. Through rigorous methods of inquiry—developed in the design studio, lectures, and seminars—students acquire the breadth of knowledge required of the professional architect, including: the techniques and processes of representation, communication, and analysis; the history and theory of making architecture and urban form for human use; and the technology, systems, processes, and economics of construction and practice. The 90-credit M.Arch. professional degree program is accredited by the National Architectural Accrediting Board (NAAB). A portfolio for admission is required.

The master of science in architecture is a nonprofessional degree offering advanced studies and research methods in sustainable design, heritage conservation and preservation, or metropolitan design. The nonprofessional M.S. in architecture seeks advanced students from architecture, building science, art history, geography, archaeology, landscape architecture, environmental design, or related disciplines to pursue multidisciplinary graduate study and research in sustainable building practices and historic preservation. The School of Architecture also offers a concurrent degree program that combines the M.Arch. professional degree and the M.S. in architecture. Students may take a total of 24 credits in common between the two academic programs. See information on the M.S. in architecture for degree requirements.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
The preferred undergraduate GPA for admittance to the program is 3.00.

Applicants must submit their test score(s) from the following:
- GRE

International applicants must submit score(s) from one of the following tests:
- TOEFL
  - Internet Based - Total Score: 79
  - Internet Based - Writing Score: 21
  - Internet Based - Reading Score: 19
- Paper Based - Total Score: 550
  - IELTS
    - Total Score: 6.5
  - MELAB
    - Final score: 80

Key to test abbreviations (GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

**Program Requirements**

**Plan C:** Plan C requires 90 major credits and null credits outside the major. There is no final exam. A capstone project is required.

**Capstone Project:** The Master's Final Project is a 10-credit studio-based design exploration under the supervision of a studio faculty mentor.

This program may not be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 2.80 is required for students to remain in good standing.

At least 4 semesters must be completed before filing a Degree Program Form.

The professional M.Arch. curriculum requires completion of a total of 90 credits (80 course credits and a 10-credit design studio Plan C Master's Final Project). M.Arch. students can expect to complete the program in six semesters (three years), including the Master's Final Project. The fall semesters include integrated core curriculum of studio, building and environmental technologies, history-theory, or digital methods. The spring semesters are organized as half-semester elective modules in studio-like projects and seminars in urban/suburban-rural, building technology and sustainable practices, history-theory-culture themes. May term study abroad options are available for qualified students in any summer semester.
Twin Cities Campus
Architecture M.S.
School of Architecture
College of Design

Link to a list of faculty for this program.

Contact Information:
School of Architecture, University of Minnesota, 145 Rapson Hall, 89 Church Street S.E., Minneapolis, MN 55455 (612-624-7866; fax: 612-624-5743)
Email: archinfo@umn.edu
Website: http://arch.cdes.umn.edu

- Program Type: Master's
- Requirements for this program are current for Fall 2011
- Length of program in credits: 33 to 34
- This program does not require summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The School of Architecture offers three distinct master of science in architecture degrees: 1) M.S. in architecture, sustainable design track; 2) M.S. in architecture, heritage conservation and preservation concentration; and 3) M.S. in architecture, metropolitan design concentration. Each of these master of science degree programs has its own unique application requirements, prerequisites, and curriculum structure. Prospective applicants are encouraged to consult the Degree Programs section of the School of Architecture website for additional information: http://arch.design.umn.edu.

Students who successfully complete the a master of science in architecture degree are eligible to receive 936 hours of IDP credit—that is 17 percent of the 5,600 hours of mandatory internship for registration as an architect. To receive the IDP credit, the M.S. degree must be earned after receiving the M. Arch degree.

The M.S. metropolitan design concentration requires summer semester coursework. The M.S. sustainable design track and the M.S. heritage conservation and preservation concentration do not require summer coursework.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
Each of the master of science in architecture programs has its own unique application requirements, prerequisites, and curriculum structure. Prospective applicants are encouraged to consult the Degree Programs section of the School of Architecture website for additional information: http://arch.design.umn.edu.

Applicants must submit their test score(s) from the following:
- GRE

International applicants must submit score(s) from one of the following tests:
- TOEFL
- IELTS
- MELAB

Key to test abbreviations (GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

Program Requirements
**Plan A:** Plan A requires 18 major credits, 6 credits outside the major, and 10 thesis credits. The final exam is oral.

**Plan B:** Plan B requires 27 to 28 major credits and 6 credits outside the major. The final exam is oral.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

The M.S. sustainable design track requires a total of 34 credits, typically completed over one-and-a-half years. Coursework includes the following: four foundation courses (12 cr); two electives in architecture (6 cr); two courses outside the department in disciplinary studies (6 cr); and either a 10-credit Plan A thesis or Plan B master's project(s).

The M.S. heritage conservation and preservation concentration requires a total of 33 credits, typically completed over one-and-a-half years. Coursework includes the following: four foundation courses (12 cr); two electives in architecture (6 cr); two electives outside of architecture (6 cr); and either a Plan A thesis (10 cr) or Plan B project(s) (9 cr).

The M.S. metropolitan design concentration requires 34 credit units out of which 12 credits are electives (6 of which are outside architecture) and 10 credits of thesis on either on Plan A or Plan B.

**Program Sub-plans**
A sub-plan is not required for this program. Students may not complete the program with more than one sub-plan.

**Sustainable Design**
Twin Cities Campus
Architecture Minor
School of Architecture
College of Design

Link to a list of faculty for this program.

Contact Information:
School of Architecture, University of Minnesota, 145 Rapson Hall, 89 Church Street S.E., Minneapolis, MN 55455 (612-624-7866; fax 612-624-5743)
Website: http://arch.cdes.umn.edu

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2011
- Length of program in credits (Masters): 6
- Length of program in credits (Doctorate): 12
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

Architecture encompasses the making and study of the buildings and environments that we inhabit. The concerns of architecture involve a wide variety of areas of study, including the art of representing built projects through drawings and computer graphics; the technology of building structure, building materials, and natural and mechanical systems; the history, theory, and art of making, using, and understanding buildings as cultural artifacts for human use; and the practice of architecture in the context of sustainable environmental systems, urban form, and business economics.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Program Requirements
Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.
Twin Cities Campus
Design M.A.
Design, Housing & Apparel
College of Design

Link to a list of faculty for this program.

Contact Information:
Director of Graduate Studies, Design Graduate Program, 240 McNeal Hall, 1985 Buford Avenue, St. Paul, MN 55108 (612-626-1219; fax: 612-624-2750)
Email: dhagrad@umn.edu
Website: http://dha.design.umn.edu/programs/grad

- Program Type: Master's
- Requirements for this program are current for Fall 2011
- Length of program in credits: 34
- This program does not require summer semesters for timely completion.
- Degree: Master of Arts

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The design graduate program focuses on the study of relationships between humans and their designed environments. This focus is based on the assumption that design and analysis of environments contributes to the improvement of the human condition. The program addresses theory, research, and application, using a shared disciplinary base from the arts and social and behavioral sciences. The goal of the program is for students to analyze, evaluate, and integrate theoretical frameworks related to humans and their designed environments.

Applications submitted to the design graduate program specify a track and degree objective. Formal tracks are:
- Apparel studies (including dress, history, and culture; product development; and retail merchandising and consumer studies)
- Graphic design (including interactive design)
- Housing studies
- Interior design (including evidence-based design) only

Program Delivery
This program is available:
via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
The preferred undergraduate GPA for admittance to the program is 3.00.

Eligibility requirements are located on the track pages of the design graduate program website:
http://dha.design.umn.edu/programs/grad.

Special Application Requirements:

Applicants must submit their test score(s) from the following:
- GRE
  - General Test - Verbal Reasoning: 153
  - General Test - Quantitative Reasoning: 144
  - General Test - Analytical Writing: 4

International applicants must submit score(s) from one of the following tests:
- TOEFL
  - Internet Based - Total Score: 79
  - Internet Based - Writing Score: 21
  - Internet Based - Reading Score: 19
  - Paper Based - Total Score: 550

The preferred English language test is Test of English as Foreign Language.
Key to test abbreviations (GRE, TOEFL).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

Program Requirements

**Plan A:** Plan A requires 18 major credits, 6 credits outside the major, and 10 thesis credits. The final exam is oral.

**Plan B:** Plan B requires 28 major credits and 6 credits outside the major. The final exam is oral.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 2.80 is required for students to remain in good standing.

At least 2 semesters must be completed before filing a Degree Program Form.

Students are required to take 4 credits in the core, 24 credits in the major field, and 6 credits in the related field or minor. Master's Plan A students are required to take 10 thesis credits. The program requires a minimum number of credits in theory and methods. Students may be required to complete additional credits upon recommendation of their committee.

The Plan B project culminates in a paper and project. Students must demonstrate familiarity with the tools of research or scholarship in their major field, the ability to work independently, and the ability to present the results of their investigation effectively.

Students may be required to complete additional credits upon recommendation of their committee.

Program Sub-plans

Students are required to complete one of the following sub-plans. Students may not complete the program with more than one sub-plan.

**Apparel Studies**
The apparel studies track advances both theoretical knowledge and applications for textile and apparel products and their relationship to human behavior. Students may focus on product development; dress, history, and culture; or retail merchandising and consumer studies. Within each of these areas of emphasis within the track, the student completes related coursework as well as research or creative production that culminates in a thesis.

**Graphic Design**
The track in graphic design focuses on design theory, process, and methods related to design practice and research. Potential areas of study include graphic design history, theory, and critical narrative; design creativity; color and design; user-centered design; design authorship; and interactive design.

**Housing Studies**
The housing studies track advances both theoretical and applied knowledge in the housing field. Through research experiences, students are prepared to assist people and communities in addressing housing-related issues. Courses emphasize human needs and behavior, analysis of designed environments, policy and community development, and housing of specific subpopulations such as the elderly or low-income families with children.

**Interior Design**
Graduate study in the interior design track emphasizes the theory, research, and specialized practice components of design as applied to people's health, safety, and welfare in the interior environment, including design education, sustainability, social/cultural issues, aspects of professional practice, and facilities research (educational, office, criminal justice, and residential). Students are prepared for teaching and research positions as well as design specializations within the profession. The evidence-based design emphasis provides students with the opportunity to explore theoretical, process, and applied aspects of this design practice approach.

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Information current as of October 01, 2012
Twin Cities Campus
Design M.F.A.
Design, Housing & Apparel
College of Design

Link to a list of faculty for this program.

Contact Information:
Director of Graduate Studies, Design Graduate Program, 240 McNeal Hall, 1985 Buford Avenue, St. Paul, MN 55108 (612-626-1219; fax 612-624-2750)
Email: dhagrad@umn.edu
Website: http://dha.design.umn.edu/programs/grad

- Program Type: Master's
- Requirements for this program are current for Fall 2011
- Length of program in credits: 60
- This program does not require summer semesters for timely completion.
- Degree: Master of Fine Arts

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The design graduate program focuses on the study of relationships between humans and their designed environments. This focus is based on the assumption that design and analysis of environments contributes to the improvement of the human condition. The program addresses theory, research, and application, using a shared disciplinary base from the arts and social and behavioral sciences. The goal of the program is for students to analyze, evaluate, and integrate theoretical frameworks related to humans and their designed environments.

Applications submitted to the design graduate program specify the track and degree objective.

The M.F.A. is available in the graphic design track only.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
The preferred undergraduate GPA for admittance to the program is 3.00.

Eligibility requirements are located on the track pages of the design graduate program website:
http://dha.design.umn.edu/programs/grad.

Special Application Requirements:

Applicants must submit their test score(s) from the following:
- GRE
  - General Test - Verbal Reasoning: 153
  - General Test - Quantitative Reasoning: 144
  - General Test - Analytical Writing: 4

International applicants must submit score(s) from one of the following tests:
- TOEFL
  - Internet Based - Total Score: 79
  - Internet Based - Writing Score: 21
  - Internet Based - Reading Score: 19
  - Paper Based - Total Score: 550
- IELTS
  - Total Score: 6.5
- MELAB
  - Final score: 80
The preferred English language test is Test of English as Foreign Language

Key to test abbreviations (GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

Program Requirements

Plan C: Plan C requires 52 major credits and 8 credits outside the major. The final exam is oral. A capstone project is required.

Capstone Project: M.F.A. coursework and research culminates in a creative thesis, which includes a paper and extensive creative project.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 2.80 is required for students to remain in good standing.

At least 2 semesters must be completed before filing a Degree Program Form.

Students are required to take 4 credits in the core, 36 credits in the major field, 8 credits in the related field or minor, and 12 credits for the creative project. The program requires a minimum number of credits in theory and methods. Students may be required to complete additional credits upon recommendation of their committee.

Program Sub-plans

Students are required to complete one of the following sub-plans. Students may not complete the program with more than one sub-plan.

Graphic Design

The track in graphic design focuses on design theory, process, and methods related to design practice and research. Potential areas of study include graphic design history, theory, and critical narrative; design creativity; color and design; user-centered design; design authorship; and interactive design.
Twin Cities Campus
Design M.S.
Design, Housing & Apparel
College of Design

Link to a list of faculty for this program.

Contact Information:
Director of Graduate Studies, Design Graduate Program, 240 McNeal Hall, 1985 Buford Avenue, St. Paul, MN 55108 (612-626-1219; fax: 612-624-2750)
Email: dhagrad@umn.edu
Website: http://dha.design.umn.edu/programs/grad

- Program Type: Master's
- Requirements for this program are current for Fall 2011
- Length of program in credits: 34
- This program does not require summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The design graduate program focuses on the study of relationships between humans and their designed environments. This focus is based on the assumption that design and analysis of environments contributes to the improvement of the human condition. The program addresses theory, research, and application, using a shared disciplinary base from the arts and social and behavioral sciences. The goal of the program is for students to analyze, evaluate, and integrate theoretical frameworks related to humans and their designed environments.

Applications submitted to the design graduate program specify the track and degree objective.

Formal tracks are:
- Apparel studies (including dress, history, and culture; product development; and retail merchandising and consumer studies)
- Graphic design (including interactive design)
- Housing studies
- Interior design (including evidence-based design)

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
The preferred undergraduate GPA for admittance to the program is 3.00.

Eligibility requirements are located on the track pages of the design graduate program website:
http://dha.design.umn.edu/programs/grad.

Special Application Requirements:

Applicants must submit their test score(s) from the following:
- GRE
  - General Test - Verbal Reasoning: 144
  - General Test - Quantitative Reasoning: 153
  - General Test - Analytical Writing: 4

International applicants must submit score(s) from one of the following tests:
- TOEFL
  - Internet Based - Total Score: 79
  - Internet Based - Writing Score: 21
  - Internet Based - Reading Score: 19
  - Paper Based - Total Score: 550
IELTS
- Total Score: 6.5
MELAB
- Final score: 80
The preferred English language test is Test of English as Foreign Language

Key to test abbreviations (GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

Program Requirements
Plan A: Plan A requires 18 major credits, 6 credits outside the major, and 10 thesis credits. The final exam is oral.

Plan B: Plan B requires 28 major credits and 6 credits outside the major. The final exam is oral.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 2.80 is required for students to remain in good standing.

At least 2 semesters must be completed before filing a Degree Program Form.

Students are required to take 4 credits in the core, 24 credits in the major field, and 6 credits in the related field or minor. Master's Plan A students are required to take 10 thesis credits. The program requires a minimum number of credits in theory and methods. Students may be required to complete additional credits upon recommendation of their committee.

The Plan B project culminates in a paper and project. Students must demonstrate familiarity with the tools of research or scholarship in their major field, the ability to work independently, and the ability to present the results of their investigation effectively. Students may be required to complete additional credits upon recommendation of their committee.

Program Sub-plans
Students are required to complete one of the following sub-plans.
Students may not complete the program with more than one sub-plan.

Apparel Studies
The apparel studies track advances both theoretical knowledge and applications for textile and apparel products and their relationship to human behavior. Students may focus on product development; dress, history, and culture; or retail merchandising and consumer studies. Within each of these areas of emphasis within the track, the student completes related coursework as well as research or creative production that culminates in a thesis.

Graphic Design
The track in graphic design focuses on design theory, process, and methods related to design practice and research. Potential areas of study include multicultural communication, visual representation of information, human interaction with designed objects, social and cultural implications of design, color systems and perception, design history, and design education. Students and faculty collaboratively develop designed objects and information resources that will enhance people's lives.

Housing Studies
The housing studies track advances both theoretical and applied knowledge in the housing field. Through research experiences, students are prepared to assist people and communities in addressing housing-related issues. Courses emphasize human needs and behavior, analysis of designed environments, policy and community development, and housing of specific subpopulations such as the elderly or low-income families with children.

Interior Design
Graduate study in the interior design track emphasizes the theory, research, and specialized practice components of design as applied to people's health, safety, and welfare in the interior environment, including design education, sustainability, social/cultural issues,
aspects of professional practice, and facilities research (educational, office, criminal justice, and residential). Students are prepared for teaching and research positions as well as design specializations within the profession. The evidence-based design emphasis provides students with the opportunity to explore theoretical, process, and applied aspects of this design practice approach.
Twin Cities Campus
Design Minor
Design, Housing & Apparel
College of Design

Link to a list of faculty for this program.

Contact Information:
Director of Graduate Studies, Design Graduate Program, 240 McNeal Hall, 1985 Buford Avenue, St. Paul, MN 55108 (612-626-1219; fax: 612-624-2750)
Email: dhagrad@umn.edu
Website: http://dha.design.umn.edu/programs/grad

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2011
- Length of program in credits (Masters): 9
- Length of program in credits (Doctorate): 12
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The design graduate program focuses on the study of relationships between humans and their designed environments. This focus is based on the assumption that design and analysis of environments contributes to the improvement of the human condition. The program addresses theory, research, and application, using a shared disciplinary base from the arts and social and behavioral sciences. The goal of the program is for students to analyze, evaluate, and integrate theoretical frameworks related to humans and their designed environments.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Program Requirements
Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.
Twin Cities Campus

Design Ph.D.
Design, Housing & Apparel
College of Design

Link to a list of faculty for this program.

Contact Information:
Director of Graduate Studies, Design Graduate Program, 240 McNeal Hall, 1985 Buford Avenue, St. Paul, MN 55108 (612-626-1219; fax: 612-624-2750)
Email: dhagrad@umn.edu
Website: http://dha.design.umn.edu/programs/grad

- Program Type: Doctorate
- Requirements for this program are current for Fall 2011
- Length of program in credits: 64
- This program does not require summer semesters for timely completion.
- Degree: Doctor of Philosophy

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The design graduate program focuses on the study of relationships between humans and their designed environments. This focus is based on the assumption that design and analysis of environments contributes to the improvement of the human condition. The program addresses theory, research, and application, using a shared disciplinary base from the arts and social and behavioral sciences. The goal of the program is for students to analyze, evaluate, and integrate theoretical frameworks related to humans and their designed environments.

Applications submitted to the design graduate program specify a track and degree objective.

Formal tracks are:
- Apparel studies (including dress, history, and culture; product development; and retail merchandising and consumer studies)
- Graphic design (including interactive design)
- Housing studies
- Interior design (including evidence-based design)

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
The preferred undergraduate GPA for admittance to the program is 3.00.

Eligibility requirements are located on the track pages of the design graduate program website:
http://dha.design.umn.edu/programs/grad.

Special Application Requirements:

Applicants must submit their test score(s) from the following:
- GRE
  - General Test - Verbal Reasoning: 144
  - General Test - Quantitative Reasoning: 153
  - General Test - Analytical Writing: 4

International applicants must submit score(s) from one of the following tests:
- TOEFL
  - Internet Based - Total Score: 79
  - Internet Based - Writing Score: 21
  - Internet Based - Reading Score: 19
  - Paper Based - Total Score: 550
• IELTS
  - Total Score: 6.5
• MELAB
  - Final score: 80
The preferred English language test is Test of English as Foreign Language

Key to test abbreviations (GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

Program Requirements
28 credits are required in the major.
12 credits are required outside the major.
24 thesis credits are required.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.0 is required for students to remain in good standing.

At least 2 semesters must be completed before filing a Degree Program Form.

Students are required to take 4 credits in the core, 23 credits in the major field, 12 credits in the related field or minor, and 24 credits of dissertation credits. The program requires a minimum number of credits in theory and methods. Students may be required to complete additional credits upon recommendation of their committee.

Program Sub-plans
Students are required to complete one of the following sub-plans. Students may not complete the program with more than one sub-plan.

Apparel Studies
The apparel studies track advances both theoretical knowledge and applications for textile and apparel products and their relationship to human behavior. Students may focus on product development; dress, history, and culture; or retail merchandising and consumer studies. Within each of these areas of emphasis within the track, the student completes related coursework as well as research or creative production that culminates in a thesis.

Graphic Design
The track in graphic design focuses on design theory, process, and methods related to design practice and research. Potential areas of study include graphic design history, theory, and critical narrative; design creativity; color and design; user-centered design; design authorship; and interactive design.

Interior Design
Graduate study in the interior design track emphasizes the theory, research, and specialized practice components of design as applied to people's health, safety, and welfare in the interior environment, including design education, sustainability, social/cultural issues, aspects of professional practice, and facilities research (educational, office, criminal justice, and residential). Students are prepared for teaching and research positions as well as design specializations within the profession. The evidence-based design emphasis provides students with the opportunity to explore theoretical, process, and applied aspects of this design practice approach.

Housing Studies
Housing studies is a multidisciplinary track that draws from a variety of theoretical perspectives. Students are trained in a variety of research methodologies. Coursework and research experiences combine to further understanding of the innovative approaches to the development of housing and related programs. Upon completion of the graduate degree, students seek housing careers in state and federal agencies, nonprofit community organizations, housing regulation, and higher education.
**Twin Cities Campus**

**Housing Studies Postbaccalaureate Certificate**

*Design, Housing & Apparel*

**College of Design**

Link to a [list of faculty](#) for this program.

**Contact Information:**
Director of Graduate Studies, Design Graduate Program, 240 McNeal Hall, 1985 Buford Avenue, St. Paul, MN 55108 (612-626-1219; fax: 612-624-2750)
Email: dhagrad@umn.edu
Website: [http://dha.cdes.umn.edu/programs/grad/prospective/admissions/housingstudiescertificateprogram.htm](http://dha.cdes.umn.edu/programs/grad/prospective/admissions/housingstudiescertificateprogram.htm)

- Program Type: Post-baccalaureate credit certificate/licensure/endorsement
- Requirements for this program are current for Fall 2011
- Length of program in credits: 15
- This program does not require summer semesters for timely completion.
- Degree: Housing Studies PBacc Cert

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The housing studies certificate is designed for individuals interested, or currently working, in housing related professions to expand their knowledge in areas including housing and community development, housing policy, residential environment and energy use, rural housing issues, housing management, and housing finance.

**Program Delivery**

This program is available:
- via classroom (the majority of instruction is face-to-face)

**Prerequisites for Admission**

The preferred undergraduate GPA for admittance to the program is 3.00.

International applicants must submit score(s) from one of the following tests:
- **TOEFL**
  - Internet Based - Total Score: 79
  - Internet Based - Writing Score: 21
  - Internet Based - Reading Score: 19
  - Paper Based - Total Score: 550
- **IELTS**
  - Total Score: 6.5
- **MELAB**
  - Final score: 80

Key to [test abbreviations](#) (TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

**Program Requirements**

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 2.80 is required for students to remain in good standing.

At least 1 semesters must be completed before filing a Degree Program Form.

The certificate consists of at least 15 credits: 2 credits in the required course and at least 13 credits from the elective options. Courses are drawn primarily from the Department of Design, Housing, and Apparel. Some elective courses require prerequisites that may be waived with instructor permission according to University policy.
Human Factors and Ergonomics M.S.
Mechanical Engineering
Graduate School

Link to a list of faculty for this program.

Contact Information:
Human Factors and Ergonomics Graduate Program, University of Minnesota, 1120 Mechanical Engineering, 111 Church Street S.E., Minneapolis, MN 55455 (612-625-2009; fax: 612-624-2010)
Website: http://www.humanfactors.umn.edu/index.shtml

- Program Type: Master's
- Requirements for this program are current for Fall 2011
- Length of program in credits: 30
- This program does not require summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

Human factors and ergonomics (HF/E) is the study of how to make technological systems safe, effective, and easy and enjoyable to use. The program offers interdisciplinary coursework that addresses human performance and how it can be enhanced through design of tools, systems, working environments, processes, and organizations. HF/E has applications ranging from clothing and living spaces to business processes, computer interfaces, and spacecraft cockpits. Companies value graduates with HF/E training because it is essential to creating effective products that can compete in a global market. The minor is available to master's and doctoral students.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
Applicants must submit their test score(s) from the following:
- GRE

International applicants must submit score(s) from one of the following tests:
- TOEFL
  - Internet Based - Total Score: 79
  - Internet Based - Writing Score: 21
  - Internet Based - Reading Score: 19
- Paper Based - Total Score: 550
- IELTS
  - Total Score: 6.5
- MELAB
  - Final score: 80

Key to test abbreviations (GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

Program Requirements
Plan A: Plan A requires 14 major credits, 6 credits outside the major, and 10 thesis credits. The final exam is oral.

Plan C: Plan C requires 24 major credits and 6 credits outside the major. The is no final exam.

This program may be completed with a minor.
Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 2 semesters must be completed before filing a Degree Program Form.

The M.S. is offered under two plans: Plan A (with thesis) and Plan C (with minor). Plan A requires completion of 20 course credits plus 10 thesis credits. Plan C requires completion of 30 course credits, including 6 non-major credits.
Twin Cities Campus
Human Factors and Ergonomics Minor
Mechanical Engineering
Graduate School
Link to a list of faculty for this program.

Contact Information:
Human Factors and Ergonomics Graduate Program, University of Minnesota, 1120 Mechanical Engineering, 111 Church Street S.E., Minneapolis, MN 55455 (612-625-2009; fax: 612-624-2010)
Website: http://www.humanfactors.umn.edu/index.shtml

• Program Type: Graduate minor related to major
• Requirements for this program are current for Fall 2011
• Length of program in credits (Masters): 7
• Length of program in credits (Doctorate): 13
• This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

Human factors and ergonomics (HF/E) is the study of how to make technological systems safe, effective, and easy and enjoyable to use. The program offers interdisciplinary coursework that addresses human performance and how it can be enhanced through design of tools, systems, working environments, processes, and organizations. HF/E has applications ranging from clothing and living spaces to business processes, computer interfaces, and spacecraft cockpits. Companies value graduates with HF/E training because it is essential to creating effective products that can compete in a global market. The minor is available to master's and doctoral students.

Program Delivery
This program is available:
• via classroom (the majority of instruction is face-to-face)

Program Requirements
Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A master's minor requires 7 graduate credits, including 6 credits of courses from an approved list (which can be found on the Human Factors and Ergonomics web page) and 1 seminar credit approved by the director of graduate studies. In addition to these 7 credits, master's students must also take a course in statistical analysis methods. The statistic course may be at the graduate or undergraduate level, and must be approved by the director of graduate studies. A doctoral minor requires 13 credits, including 12 credits from the approved list of courses, and 1 seminar credit approved by the director of graduate studies. In addition to these 13 credits, doctoral students must also take courses in statistical analysis methods and design of experiments. The statistics courses may be at the undergraduate or graduate level, and must be approved by the director of graduate studies.
Twin Cities Campus

Human Factors and Ergonomics Ph.D.
Mechanical Engineering
Graduate School

Link to a list of faculty for this program.

Contact Information:
Human Factors and Ergonomics Graduate Program, University of Minnesota, 1120 Mechanical Engineering, 111 Church Street S.E., Minneapolis, MN 55455 (612-625-2009; fax: 612-624-2010)
Website: http://www.humanfactors.umn.edu/index.shtml

- Program Type: Doctorate
- Requirements for this program are current for Fall 2011
- Length of program in credits: 66
- This program does not require summer semesters for timely completion.
- Degree: Doctor of Philosophy

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

Human factors and ergonomics (HF/E) is the study of how to make technological systems safe, effective, and easy and enjoyable to use. The program offers interdisciplinary coursework that addresses human performance and how it can be enhanced through design of tools, systems, working environments, processes, and organizations. HF/E has applications ranging from clothing and living spaces to business processes, computer interfaces, and spacecraft cockpits. Companies value graduates with HF/E training because it is essential to creating effective products that can compete in a global market.

Program Delivery
This program is available:
• via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
Applicants must submit their test score(s) from the following:
• GRE

International applicants must submit score(s) from one of the following tests:
• TOEFL
  - Internet Based - Total Score: 79
  - Internet Based - Writing Score: 21
  - Internet Based - Reading Score: 19
  - Paper Based - Total Score: 550
• IELTS
  - Total Score: 6.5
• MELAB
  - Final score: 80

Key to test abbreviations (GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

Program Requirements
42 credits are required in the major.
24 thesis credits are required.

This program may not be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.
Major Course Requirements: 14 credits total from the core, including
- 3 credits in statistics or experimental design
- 3 credits in Human Factors Foundations
- 3 credits in Physical Human Factors
- 3 credits in Cognitive Human Factors

The balance of core credits may come from any category on the core list. Furthermore, in order to ensure that students receive interdisciplinary exposure to multiple perspectives, they must choose core courses (excluding statistics and experimental design courses) from at least three different departments.
Twin Cities Campus
Landscape Architecture M.L.A.
Landscape Architecture
College of Design

Contact Information:
Department of Landscape Architecture, 144 Rapson Hall, 89 Church Street S.E., Minneapolis, MN 55455 (612-625-6860; fax: 612-625-0710)
Website: http://landarch.design.umn.edu

- Program Type: Master's
- Requirements for this program are current for Fall 2011
- Length of program in credits: 88
- This program does not require summer semesters for timely completion.
- Degree: Master of Landscape Architecture

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The master of landscape architecture (M.L.A.) is a first professional degree required for students who wish to become licensed landscape architects. The program introduces students to the practice and discipline of landscape architecture, providing them with the artistic, technical, cognitive and communication skills, and the scientific and aesthetic knowledge necessary to practice in the profession and in other environmental fields.

The M.L.A. program is a three-year degree for students already possessing a baccalaureate degree. The program requires 88 graduate credits. Students with baccalaureate degrees in landscape architecture or architecture may apply to the three-year M.L.A. and be accepted with advanced standing.

Coursework for the M.L.A. exposes students to the broad field of landscape architecture as both a discipline and a profession. Classes are collaborative in nature and challenge students to delve into landscape issues that cut across multiple systems and scales. At the core of the M.L.A. curriculum are six design studios, one in each of the six semesters of the degree program.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
The preferred undergraduate GPA for admittance to the program is 3.00.

M.L.A. program applicants must have completed a baccalaureate degree. M.S. program applicants must have completed an accredited baccalaureate or graduate degree in landscape architecture or a baccalaureate degree in a related discipline.

Special Application Requirements:
M.L.A. program applicants must apply by January 15 for entry the following fall in order to receive first consideration for admission, fellowships, and assistantships. In addition to completing the Graduate School application requirements, applicants must submit all of the following: three recommendations, responses in English to the two questions pertaining to landscape architecture, all essays required by the Graduate School, a resume. All of these additional items should be submitted by uploading them to the Graduate School's electronic application system. International students must submit scores from the TOEFL, IELTS, or the MELAB. The department may give advanced standing for specific required professional degree courses when an applicant has taken a course elsewhere and provides evidence that enables it to be judged equivalent to those offered by the department. An 8.5" x 11" portfolio containing examples of creative work is preferred for all M.L.A. applications, and is required to obtain advanced standing in design. Portfolios should be sent directly to the department. Applicants with degrees in related design professions such as architecture, environmental design, or planning should clearly indicate their interest in being evaluated for admission with advanced standing with a direct letter to the director of graduate studies. GRE scores are not required for entry to the M.L.A., however, they can be helpful to applicants seeking fellowships and assistantships. A cumulative GPA of 3.00 or higher is preferred. Because of resource limitations, students are admitted for entry into the M.L.A. program only for the fall semester. More detailed information about the above departmental application requirements and procedures, including a downloadable checklist in PDF format, may be found at the department website, http://landarch.cdes.umn.edu/prog/admissions.php.
International applicants must submit score(s) from one of the following tests:

- **TOEFL**
  - Internet Based - Total Score: 86
  - Paper Based - Total Score: 600
- **IELTS**
  - Total Score: 6.5
- **MELAB**
  - Final score: 80

Key to test abbreviations (TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

### Program Requirements

**Plan B:** Plan B requires 82 major credits and 6 credits outside the major. The final exam is written.

**Plan C:** Plan C requires 82 major credits and 6 credits outside the major. There is no final exam. A capstone project is required.

**Capstone Project:** A capstone design project is required.

This program may not be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

The M.L.A. program, which is accredited by the national Landscape Architecture Accreditation Board (LAAB), is designed for students who wish to become registered professional landscape architects. Areas of required coursework within the program include design, technology and ecology, graphic and written communication, landscape history, and research methods. To develop a special focus or to explore areas in more depth, students are encouraged to select from among the graduate seminars offered to fulfill elective requirements. To meet LAAB standards, 88 graduate credits are required for students without previous design experience. Because coursework is organized in a sequential framework of six design studios, commitment to the program for three successive years is essential.

Students who hold an accredited professional bachelor's degree in landscape architecture may complete the M.L.A. with 30 credits, including 12 credits of landscape architecture studio courses, 3 credits of landscape architecture research issues and methods, and 15 elective credits, 6 of which must be outside of the department. Up to 9 credits earned as part of the M.L.A. may be applied to the M.S.
Twin Cities Campus
Landscape Architecture M.S.
College of Design

Link to a list of faculty for this program.

Contact Information:
Department of Landscape Architecture, 144 Rapson Hall, 89 Church Street S.E., Minneapolis, MN 55455 (612-625-6860; fax: 612-625-0710)
Website: http://landarch.design.umn.edu

Program Type: Master's
Requirements for this program are current for Fall 2011
Length of program in credits: 30
This program does not require summer semesters for timely completion.
Degree: Master of Science

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The M.S. is for students with a clear focus in research related to landscape architecture. M.S. students build expertise related to the practice of landscape architecture as they learn how to conduct research. Students specialize within areas of faculty expertise, which may include art and landscape architecture, landscape ecology, landscape architectural history and theory, park and recreation design, rural and suburban landscape planning, transportation, planning of world heritage sites, and urban design.

Program Delivery
This program is available:
• via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
The preferred undergraduate GPA for admittance to the program is 3.00.

International applicants must submit score(s) from one of the following tests:
• TOEFL
  - Internet Based - Total Score: 79
  - Internet Based - Writing Score: 21
  - Internet Based - Reading Score: 19
  - Paper Based - Total Score: 550
• IELTS
  - Total Score: 6.8
• MELAB
  - Final score: 80

Key to test abbreviations (TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

Program Requirements
Plan A: Plan A requires 6 major credits, 6 credits outside the major, and 10 thesis credits. The final exam is oral.

This program may be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 4 semesters must be completed before filing a Degree Program Form.
The M.S. requires 30 credits, including at least 6 credits within landscape architecture, 10 thesis credits, and at least 6 credits in an area of focus outside of landscape architecture.
Twin Cities Campus

Landscape Architecture Minor

Landscape Architecture
College of Design

Link to a list of faculty for this program.

Contact Information:
Department of Landscape Architecture, University of Minnesota, 144 Rapson Hall, 89 Church Street S.E., Minneapolis, MN 55455 (612-625-6860; fax: 612-625-0710)
Email: gsland@umn.edu
Website: http://landarch.design.umn.edu

- Program Type: Graduate minor related to major
- Requirements for this program are current for Fall 2011
- Length of program in credits (Masters): 6
- Length of program in credits (Doctorate): 12
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

Students in landscape architecture develop professional design skills through courses that address the increasingly complex relationships between art, ecology, and community that influence and inform design on the land. Courses emphasize three principal areas of study: 1) landscape architecture as a means to add to the aesthetic richness of our culture and environment—helping us to better understand ourselves and our place in the world; 2) integration of biological, geophysical, and ecological processes into lasting, meaningful, and systemically rigorous landscape architecture that sustains and protects the health of people and the ecosystems on which they depend; and 3) design for urban and suburban places and people, with emphasis on gaining knowledge and experience through direct engagement with clients and the public in order to address the problems and opportunities of the metropolitan core of cities.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Program Requirements
Use of 4xxx courses towards program requirements is not permitted.

Minor requirements are determined in consultation with the director of graduate studies.
Twin Cities Campus
Metropolitan Design Postbaccalaureate Certificate
Design, Housing & Apparel
College of Design

Contact Information:
College of Design, Metropolitan Design Program, 1 Rapson Hall, 89 Church Street S.E., Minneapolis, MN 55455 (625-9000; fax: 626-0600)
Email: mdc@umn.edu
Website: http://www.designcenter.umn.edu

- Program Type: Post-baccalaureate credit certificate/licensure/endorsement
- Requirements for this program are current for Fall 2011
- Length of program in credits: 21
- This program does not require summer semesters for timely completion.
- Degree: Metropolitan Design PBacc Certificate

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The metropolitan design certificate at the College of Design prepares students with the essential knowledge and understanding of the City within the complexities of the 21st-century metropolis. As suburban development is losing some of its past seductions, traditional cities are being transformed to accommodate the return to city living, an American countetrend that requires the integrative approach of many fields of knowledge.

The certificate is open to graduate students in the College of Design and graduate students from other colleges with related urban planning programs are welcome to apply. The certificate is a two-semester, 21-credit course sequence within existing master's degrees at the College of Design. It is strongly recommended that the required urban design courses should be taken in sequence. There is no additional tuition charge to complete the certificate.

Interested students should enroll during the second semester (spring) of graduate studies. It is recommended that students make a decision to enroll in the certificate early so that the completion of courses can be made within the time required for completion of the professional degree.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
An application is required including a 2-page statement of interest in the program, university transcripts, and a portfolio of design work (no more 10 pages). Other students not from the College of Design should submit comparable graphic examples and two written papers.

International applicants must submit score(s) from one of the following tests:
- TOEFL
  - Internet Based - Total Score: 79
  - Internet Based - Writing Score: 21
  - Internet Based - Reading Score: 19
  - Paper Based - Total Score: 550
- IELTTS
  - Total Score: 6.5
- MELAB
  - Final score: 80

Key to test abbreviations (TOEFL, IELTTS, MELAB).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.
Program Requirements
Use of 4xxx courses towards program requirements is not permitted.

Required Courses
ARCH 5711
ARCH 5721
ARCH 5731
ARCH 8255 or ARCH 52xx or ARCH xxxx (6 cr, studio)

Electives
(Students should choose a minimum of 2 courses from the following list.)
ARCH 5313 - Visualization/Communications Techniques 3 cr (Fall)
ARCH 5441 - Minnesota Architecture and Landscape 3 cr (Sp.)
ARCH 5501 - Architecture and Ecology 3 cr (Fall)
ARCH 5539 - Daylighting and Architecture Design 3 cr (Sp.)
ARCH 5542 - Building Energy Systems (DGS prior permission) 3 cr (Fall)
ARCH 5571 - Historic Preservation 3 cr (Fall)
HSG 5467 - Housing and the Social Environment 4 cr (Fall, Sp.)
LA 5201 - Making Landscape Spaces and Types 3 cr (Fall)
LA 5400 - Re-greening Cities and Bioregions 3 cr (Fall)
LA 5571 - Landform Systems and Spatial Performance 3 cr (Fall)
LA 5755 - Infra. Nat. Systems and the Spaces of 3 cr (Fall)
PA 5204 - Urban Spatial and Social Dynamics 3 cr (Fall, Sp.)
PA 5212 - Managing Urban Growth and Change 3 cr (Fall)
PA 5231 - Transit Planning and Management 3 cr (Fall)
PA 5261 - Housing Policy 3 cr (Fall)
PA 5511 - Community Economic Development 3 cr (Fall)
PA 8202 - Networks and Places: Transportation, Land Use, Design 4 cr (Fall)
Twin Cities Campus

Museum Studies Minor
Design, Housing & Apparel
College of Design

Link to a list of faculty for this program.

Contact Information:
Museum Studies Graduate Minor, Bell Museum of Natural History, 10 Church Street S.E., Minneapolis, MN 55455 (612-624-6380; fax: 612-626-7704)
Email: murdo001@umn.edu
Website: http://www.bellmuseum.org/museum_studies.html

- Program Type: Graduate free-standing minor
- Requirements for this program are current for Fall 2011
- Length of program in credits (Masters): 7
- Length of program in credits (Doctorate): 12
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The museum studies minor offers a structured graduate curriculum for master's and doctoral students interested in museums. It provides students from a variety of disciplines with an introduction to the issues involved in museum practices (e.g., educational, curatorial, administrative, and conservation). The curriculum includes seminars and internships.

Program Delivery
This program is available:
  • via classroom (the majority of instruction is face-to-face)

Program Requirements
Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

The master's and doctoral minors require 7 and 12 credits respectively. Each requires the introductory seminar (MST 5011, 3 cr), the museum practices course (MST 5012, 3 cr), and at least one credit of internship (MST 5020). Additional credits for the doctoral minor may be internship or directed study (MST 8993).
Twin Cities Campus
Product Design Minor
Design, Housing & Apparel
College of Design

Link to a list of faculty for this program.

Contact Information:
Director of Graduate Studies, Product Design Graduate Minor, 240 McNeal Hall, 1985 Buford Avenue, St. Paul, MN 55108 (612-626-1219; fax 612-624-2750)
Email: cklarqui@umn.edu
Website: http://product.design.umn.edu

• Program Type: Graduate free-standing minor
• Requirements for this program are current for Fall 2011
• Length of program in credits (Masters): 12
• Length of program in credits (Doctorate): 12
• This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

Product design is the planning of an item intended to be manufactured and sold. These items exist both as discrete artifacts and as actors in larger social systems, such as branded environments, services, experiences, and social interactions. A graduate minor may be earned in product design when it logically relates to the graduate major field. The minor program is designed to suit the particular needs and interests of the student. The course of study is determined in consultation with the student's major adviser and the director of graduate studies for the minor.

Program Delivery
This program is available:
• via classroom (the majority of instruction is face-to-face)

Program Requirements
Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

Courses taken in fulfillment of the major field may not be used to fulfill requirements of the product design minor.

The course of study is determined in consultation with the student's major adviser and the director of graduate studies for the minor.
Twin Cities Campus
Surface Design Postbaccalaureate Certificate
Design, Housing & Apparel
College of Design

Link to a list of faculty for this program.

Contact Information:
Director of Graduate Studies, Surface Design Certificate, 240 McNeal Hall, 1985 Buford Avenue, St. Paul, MN 55108 (612-626-1219; fax: 612-624-2750)
Email: dhagrad@umn.edu
Website: http://dha.design.umn.edu/programs/grad

- Program Type: Post-baccalaureate credit certificate/licensure/endorsement
- Requirements for this program are current for Fall 2011
- Length of program in credits: 15
- This program does not require summer semesters for timely completion.
- Degree: Surface Design PBac Certificate

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The surface design certificate helps designers develop and build on skills needed in contemporary design education and design professions—the importance of studio practice, the ability to work in creative teams, conceptual thinking, and the creative integration of digital and non-digital skills. Design, craft, and aesthetic theory is integrated into the studio courses. Students embrace traditional methods and are encouraged to explore innovative approaches to surface design. The purpose of promoting non-digital methods is not merely to encourage excellence in craft and hand skills, but to emphasize a seamless link between technological advances and traditional skills and materials, and also to emphasize the role of evolving design production technologies in the creative process.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
The preferred undergraduate GPA for admittance to the program is 3.00.

Special Application Requirements:
A portfolio consisting of 8-10 examples of creative work is required.

International applicants must submit score(s) from one of the following tests:
- TOEFL
  - Internet Based - Total Score: 79
  - Internet Based - Writing Score: 21
  - Internet Based - Reading Score: 19
  - Paper Based - Total Score: 550
- IELTS
  - Total Score: 6.5
- MELAB
  - Final score: 80

Key to test abbreviations (TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the General Information section of the catalog website.

Program Requirements
Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 2.80 is required for students to remain in good standing.
At least 1 semesters must be completed before filing a Degree Program Form.

This is a coursework-only certificate; there is no final project or thesis. A minimum of 15 credits is required for completion of the certificate.