# APPAREL, MERCHANDISING, AND DESIGN 

Administered by the Department of Apparel, Events, and Hospitality Management. Leading to the degree bachelor of science.

Total credits required: 123 including a minimum of 18 credits in A M D at lowa State University for the degree (12 of the 18 credits must be at the 300-400 level). The major in apparel, merchandising, and design provides a broad-based program of study with flexibility in creating program options. Courses are required in general education, and apparel industry professional core. To complete the program, a student selects a primary option from design, product development and innovation, product management and sourcing, merchandising and retail analytics, and fashion communication.

Minors are available in apparel, merchandising, and design; textile science and product performance; a textile design minor in collaboration with the College of Design; and a merchandising certificate.

## Undergraduate Study

The program offers study for the degree of Bachelor of Science with a major in apparel, merchandising, and design (A M D). The program offers students a broad understanding of textile and apparel products, merchandising and marketing strategies, technical and creative design, product development, production processes, and business practices leading to a wide range of careers at state, national, and international levels in business and industry. Courses in the program provide scientific, technical, and humanistic knowledge about textiles, apparel, and related products basic to career preparation. Courses also provide knowledge applicable to the development and use of apparel and textile products by individuals, families, and institutions. The program provides a foundation for graduate study. Graduates understand the production, distribution, and use of textiles and apparel, aesthetic expression, and communication. They are prepared to plan, develop, source and present textile and apparel products to meet the needs of consumers. Students understand the issues involved in textile and apparel production and marketing, both nationally and internationally. Graduates appreciate the interdependence of nations and cultures as producers and consumers of textile products.

The A M D major provides a broad-based program of study with flexibility in creating an individualized program. To complete the program, a student combines general education, A M D core classes, and structured clusters of courses to form an option in merchandising and retail analytics, fashion communication, product management and sourcing, product development and innovation, or design

An option in merchandising and retail analytics prepares students for the planning, promotion, and presentation of market-oriented product lines and events. Career opportunities are in buying, promotion, sales, product development, branding, and management in both manufacturing and retailing sectors with a focus on the textile and apparel industry. An option of fashion communications prepares students for the development and delivery of visual, written, and oral communication. Career opportunities are in visual merchandising, styling, fashion influencing, social media, and communication. An option in creative and technical design is appropriate for those interested in the aesthetic and creative aspects of design, technical design, costuming, textile design, and product development. An option in product development and innovation is appropriate for those interested in developing innovative products for special markets including accessories. footwear, performance wear, smart textiles, functional apparel, and softgoods for home. Career opportunities include designer, materials testing, quality assurance, and technical design. An option in product management and sourcing is appropriate for those interested in both line planning, product development, and merchandising products or lines for consumer groups, sourcing, quality assurance, and manufacturing. Instead of a portfolio review for admission, students in the design and product development options have a review of their first year design skills (A M D 206 Design Selective Advancement) after completing A M D 121 Apparel Assembly, A M D 131 Overview of the Fashion Industry, A M D 178 Introduction to Fashion Design Studio, and A M D 204 Textile Science. The A M D 206 Design Selective Advancement project is scored by design industry professionals and determines if/when students move forward into the Design option.

The program offers a concurrent B.S. and M.S. degree that allows students to obtain a B.S. and M.S. degree in apparel, merchandising, and design in 5 years. Application for admission to the Graduate College should be made in the junior year.

For additional courses of interest, see Apparel, Events, and Hospitality Management.

## Grade Point Requirement

All students majoring in apparel, merchandising, and design are required to earn a C- or better in all AESHM and A M D courses applied toward the degree, including transfer credits.

## Communication Proficiency Requirement

Undergraduate English proficiency is certified when the student has received a grade of C or better in ENGL 150 Critical Thinking and Communication, and ENGL 250 Written, Oral, Visual, and Electronic Composition.

Students who receive a C-, D+, D, or D- in ENGL 150 Critical Thinking and Communication or ENGL 250 Written, Oral, Visual, and Electronic

Composition may take one of the following, with permission from the English Department, instead of repeating the lower-level course:

| ENGL 302 | Business Communication | 3 |
| :--- | :--- | :--- |
| ENGL 309 | Proposal and Report Writing | 3 |
| ENGL 314 | Technical Communication | 3 |

## Minor

A minor in apparel, merchandising, and design requires (15-17 cr.) of the following:

Select from: 3

| A M D 121 | Apparel Assembly Processes |  |
| :---: | :--- | :--- |
| A M D 131 | Fashion Products and Markets |  |
| A M D 165 | Dress, Appearance, and Diversity in Society |  |
| A M D 178 | Introduction to Apparel Design Studio | $3-4$ |
| Select from: |  | $3-4$ |
| A M D 204 | Textile Science |  |
| Select from: |  |  |
| A M D 231 | Product Development and Manufacturing |  |
| A M D 245 | Aesthetics and Brand Image |  |
| A M D 257 | Museum Studies |  |
| A M D 275 | Retail Merchandising | 6 |
| 300-400 level at lowa State University in A M D or approved AESHM | 6 |  |


| AESHM 340 | Hospitality and Apparel Marketing Strategies |
| :--- | :--- |
| AESHM 342 | Aesthetics of Consumer Experience |
| AESHM 470N | Supervised Professional Internship: Apparel |
| AESHM 472 | Fashion Show Management |
| AESHM 474 | Entrepreneurship in Human Sciences |

AESHM 476CX Entrepreneurship Studio: Creating an Online Business

AESHM 499X Research, Seminar, or Senior Project
A M D 305 Quality Assurance of Textiles and Apparel
A M D 328 Apparel, Merchandising, and Design Seminar
A M D 354 History of European and North American Dress
A M D 356 History of Twentieth Century Fashion
A M D 362 Cultural Perspectives of Dress
A M D 372 Sourcing and Global Issues
A M D 375 Omni-Channel Retailing
A M D 376 Merchandise Planning and Buying
A M D 377 Visual Presentation and Promotions
A M D 393 Apparel, Merchandising, and Design Workshop
A M D 404 Innovative Textiles
A M D 431 Apparel Production Management

A M D 458X Queer Fashions, Styles, and Bodies

| A M D 467 | Consumer Studies in Apparel and Fashion <br> Products |  |
| ---: | :--- | :--- |
| A M D 475 | Retail Information Analysis |  |
| A M D 490 | Independent Study |  |
| A M D 499 | Undergraduate Research |  |
| Total Credits |  | $\mathbf{1 5 - 1 7}$ |

## Certificate

A certificate in Merchandising requires (22 cr.) of the following:

| A M D 275 | Retail Merchandising | 3 |
| :--- | :--- | ---: |
| A M D 375 | Omni-Channel Retailing | 3 |
| A M D 376 | Merchandise Planning and Buying | 4 |
| A M D 475 | Retail Information Analysis | 3 |
| Select from: |  | 9 |
| AESHM 287 | Principles of Management in Human Sciences |  |
| AESHM 340 | Hospitality and Apparel Marketing Strategies |  |
| AESHM 342 | Aesthetics of Consumer Experience |  |
| AESHM 470N | Supervised Professional Internship: Apparel |  |
| AESHM 474 | Entrepreneurship in Human Sciences |  |
| A M D 165 | Dress, Appearance, and Diversity in Society |  |
| A M D 245 | Aesthetics and Brand Image |  |
| A M D 372 | Sourcing and Global Issues |  |
| A M D 377 | Visual Presentation and Promotions |  |
| A M D 467 | Consumer Studies in Apparel and Fashion |  |

Total Credits

## Curriculum in Apparel, Merchandising, and Design

Administered by the Department of Apparel, Events, and Hospitality Management. Leading to the degree bachelor of science.

Total credits required: 123 including a minimum of 18 credits in AMD at Iowa State University for the degree ( 12 of the 18 credits must be at the 300-400 level).

Cr. Degree Requirements

## Communications Skills

| ENGL 150 | Critical | Thinking and Communication |
| :--- | :--- | :--- |
| ENGL 250 | Written, Oral, Visual, and Electronic Composition | 3 |
| LIB 160 | Information Literacy | 1 |
| Select one of the following: | 3 |  |

COMST 210 Communication and U.S. Diversity

| COMST 214 | Professional Communication |  |
| :---: | :---: | :---: |
| COMST 218 | Conflict Management |  |
| SP CM 212 | Fundamentals of Public Speaking |  |
| Total Credits |  | 10 |
| Biological and Ph Mathematics (MA MATH 140 requi | sical Sciences and Mathematical Disciplines TH 150 recommended for merchandising. d for design and product development) | 3 |
| Select from natural sciences. Creative and Technical Design, Product 3-5 Development, and Product Innovation Options must take CHEM 163 and CHEM 163L. |  |  |
| Select one class from: |  | 3-4 |
| STAT 101 | Principles of Statistics |  |
| STAT 104 | Introduction to Statistics |  |
| STAT 226 | Introduction to Business Statistics I |  |
| Total Credits |  | 9-12 |
| Social Sciences |  |  |
| ECON 101 | Principles of Microeconomics | 3 |
| A M D 165 | Dress, Appearance, and Diversity in Society | 3 |
| Select from A M D list, including A M D 362 |  | 3 |
| Total Credits |  | 9 |
| Humanities <br> Select one (1) class from A M D list (world language and cultures course recommended). |  |  |
| A M D 356 | History of Twentieth Century Fashion | 3 |
| History/Art History (Creative and Technical Design: ART H required) |  | 3 |
| Total Credits |  | 9 |
| Pre-Professional Development Courses |  |  |
| AESHM 112 | Orientation for AESHM | 1 |
| AESHM 113N | Professional Development for AESHM: Common Threads Learning Community | 1 |
| AESHM 311N | Seminar on Careers and Internships: Apparel, Merchandising, and Design | 1 |
| AESHM 411N | Seminar on Current Issues: Apparel | 1 |
| AESHM 470N | Supervised Professional Internship: Apparel | 3-6 |
| Field Study (if AESHM 470 is not out-of-home-state) |  | 2-3 |
| AESHM 380N | U.S. Field Study: Apparel, Merchandising, and Design |  |
| AESHM 381N | International Field Study: Apparel, Merchandising, and Design |  |

Total Credits
9-13

## A M D Integrated Core

| A M D 131 | Fashion Products and Markets | 3 |
| :--- | :--- | ---: |
| A M D 204 | Textile Science | 4 |
| A M D 210 | Computer Applications in Digital Design | 3 |
| A M D 231 | Product Development and Manufacturing | 4 |
| A M D 245 | Aesthetics and Brand Image | 3 |
| A M D 275 | Retail Merchandising | 3 |
| A M D 372 | Sourcing and Global Issues | 3 |
| COM S 113 | Introduction to Spreadsheets and Databases | 3 |
| Total Credits |  | $\mathbf{2 6}$ |

## Primary Options

Select one professional primary option from the following three choices:

## Creative and Technical Design Primary Option

| A M D 121 | Apparel Assembly Processes | 4 |
| :--- | :--- | :--- |
| A M D 178 | Introduction to Apparel Design Studio | 3 |
| A M D 206 | Design Selective Advancement | R |
| A M D 225 | Patternmaking I: Drafting and Flat Pattern | 3 |
| A M D 278 | Fashion Illustration | 3 |
| A M D 310 | Computer Aided Apparel Patternnmaking | 3 |
| A M D 321 | Computer Integrated Textile and Fashion Design | 3 |
| A M D 325 | Patternmaking II: Draping | 3 |
| A M D 329 | Digital Textile Printing for Apparel Design | 3 |
| A M D 415 | Technical Design Processes | 3 |
| A M D 495 | Senior Design Studio | 3 |
| Select from: |  | 3 |


| A M D 305 | Quality Assurance of Textiles and Apparel |  |
| :---: | :--- | :--- |
| A M D 404 | Innovative Textiles |  |
| A M D 431 | Apparel Production Management |  |
| Select from: |  | 3 |
| A M D 354 | History of European and North American Dress |  |

A M D 362 Cultural Perspectives of Dress

Select two (2) classes from approved AMD, AESHM, THTRE, ART IS, 6
DSGN, or DSN S. This category can be waived with approved doublemajor.

| Total Credits | 43 |
| :--- | :--- |

Product Development and Innovation Primary Option

| A M D 121 | Apparel Assembly Processes | 4 |
| :--- | :--- | :--- |
| A M D 178 | Introduction to Apparel Design Studio | 3 |
| A M D 226X | 3D Designing and Patternmaking for Soft Good | 3 |
|  | Product Development |  |
| A M D 305 | Quality Assurance of Textiles and Apparel | 3 |
| A M D 321 | Computer Integrated Textile and Fashion Design | 3 |


| A M D 376 | Merchandise Planning and Buying | 4 |
| :---: | :---: | :---: |
| A M D 404 | Innovative Textiles | 3 |
| A M D 431 | Apparel Production Management | 3 |
| A M D 496 | Fashion Product Development and Prototyping | 3 |
| DSN S 131 | Drawing I | 4 |
| Select three (3) IND D, T SC, ENV approved double | lasses from approved AMD, AESHM, CHEM, GLOBE, $S$ courses. This category can be waived with major. | 9 |
| A M D 225 | Patternmaking I: Drafting and Flat Pattern | 3 |
| Total Credits |  | 45 |
| Product Manage | nent and Sourcing Primary Option |  |
| A M D 121 | Apparel Assembly Processes | 4 |
| A M D 178 | Introduction to Apparel Design Studio | 3 |
| A M D 226X | 3D Designing and Patternmaking for Soft Good Product Development | 3 |
| A M D 305 | Quality Assurance of Textiles and Apparel | 3 |
| A M D 376 | Merchandise Planning and Buying | 4 |
| A M D 415 | Technical Design Processes | 3 |
| A M D 431 | Apparel Production Management | 3 |
| A M D 467 | Consumer Studies in Apparel and Fashion Products | 3 |
| A M D 496 | Fashion Product Development and Prototyping | 3 |
| AESHM 340 or MKT 340 | Hospitality and Apparel Marketing Strategies Principles of Marketing | 3 |
| ACCT 284 | Financial Accounting | 3 |
| SCM 301 | Supply Chain Management | 3 |
| Select one (1) cl S, GLOBE, T SC double-major. | ss from elective list of approved AESHM, AMD, ENV ass. This category can be waived with appropriate | 3 |
| Total Credits |  | 41 |
| Merchandising a ACCT 284 | d Retail Analytics Primary Option <br> Financial Accounting | 3 |
| AESHM 340 or MKT 340 | Hospitality and Apparel Marketing Strategies Principles of Marketing | 3 |
| AESHM 474 | Entrepreneurship in Human Sciences | 3 |
| A M D 328 T | Apparel, Merchandising, and Design Seminar. <br> Fashion Trend Forecasting | 1-3 |
| A M D 375 | Omni-Channel Retailing | 3 |
| A M D 376 | Merchandise Planning and Buying | 4 |
| A M D 377 | Visual Presentation and Promotions | 3 |
| A M D 467 | Consumer Studies in Apparel and Fashion Products | 3 |


| A M D 475 | Retail Information Analysis | 3 |
| :---: | :---: | :---: |
| DS 201 | Introduction to Data Science | 3 |
| Select four (4) classes for 12 credits from approved AMD or AESHM electives. Four courses in approved double-major or two courses from minor can be used in this category. |  |  |
| Total Credits |  |  |
| Fashion Communication Primary Option |  |  |
| ACCT 284 | Financial Accounting | 3 |
| AESHM 340 or MKT 340 | Hospitality and Apparel Marketing Strategies <br> Principles of Marketing | 3 |
| AESHM 474 | Entrepreneurship in Human Sciences | 3 |
| A M D 328T | Apparel, Merchandising, and Design Seminar. Fashion Trend Forecasting | 3 |
| A M D 328Y | Apparel, Merchandising, and Design Seminar. Styling |  |
| A M D 376 | Merchandise Planning and Buying | 4 |
| A M D 377 | Visual Presentation and Promotions | 3 |
| EVENT 277 | Introduction to Digital Promotion in Event Management | 3 |
| Select two (2) minor or doubl PR, Technical | sses for a total of six (6) credits from approved major including ADVRT, COM ST, D S, EVENT, JL MC, mmunication | 6 |
| Select two (2) electives, inclu majors includin PR. | sses for a total of six (6) credits from approved g AMD and AESHM courses and approved doubleADVRT, COM ST, D S, ENTR, EVENT, JL MC, MKT, and | 6 |
| Total Credits | 33 |  |
| Apparel Merchandising, Design B.S. - Creative Technical Design Primary |  |  |

## Freshman

| Fall Credits | Spring | Credits |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { A M D } 131^{\text {Fall }} \\ & \text { only } \end{aligned}$ | 3 A M D 121 |  |
| A M D 178 | 3 A M D 165 |  |
| AESHM 112 | 1 A M D 204 |  |
| AESHM 113N | 1 A M D 206 |  |
| ENGL 150 | 3 ENGL 250 |  |
| LIB 160 | 1 MATH 140 |  |
| Social | 3 |  |




Total Credits: 124

Apparel, Merchandising, and Design, B.S. -- Product Management Sourcing Primary Option

## Freshman

| Fall $\quad$ Credits | Spring | Credits |
| :--- | :--- | :--- |
| A M D 131 |  |  |
| Fall <br> only | 3 A M D 121 | 4 |
| A M D 165 | 3 A M D 204 | 4 |
| A M D 178 | 3 ENGL 250 | 3 |
| AESHM 112 | 1 MATH 140 | 3 |
| ENGL 150 | 3 Elective | 3 |
| AESHM 113N | 1 |  |
| LIB 160 | 1 | $\mathbf{1 7}$ |


| Sophomore |  |  |
| :--- | :--- | ---: |
| Fall | Credits | Spring |
| A M D 210 | Credits |  |
| A M D 245 | 3 A M D 231 | 4 |
| A M D 275 | 3 A M D 226X | 3 |
| CHEM 163 | 3 ACCT 284 | 3 |
| CHEM 163L | 4 AESHM 311N | 1 |
| ECON 101 | 1 AESHM 380N | $1-3$ |
|  | 3 Humanities | 3 |
|  | Elective |  |


| 17 | $15-17$ |
| :--- | :--- |


| Junior |  |  |
| :---: | :---: | :---: |
| Fall Credits | Spring Credits | Summer Credits |
| A M D 376 | 4 A M D $356{ }^{\text {Spring }}$ | 3 AESHM 470N |
| AESHM 340 | 3 A M D 372 | 3 |
| COM S 113 | 3 History | 3 |
| Statistics | 4 SP CM | 3 |
|  | Product | 3 |
|  | Management |  |
|  | Sourcing |  |
|  | Elective |  |


|  | 14 | 15 | 6 |
| :---: | :---: | :---: | :---: |
| Senior |  |  |  |
| Fall Credits | Spring Credits |  |  |
| A M D 305 | $\begin{aligned} & 3 \text { A M D } 431^{\text {Spring }} \\ & \text { only } \end{aligned}$ | 3 |  |
| A M D 415 | $\begin{aligned} & 3 \text { A M D } 496^{\text {Spring }} \\ & \text { only } \end{aligned}$ | 3 |  |
| AESHM 411N | 1 SCM 301 | 3 |  |
| A M D 467 | 3 Elective | 1 |  |


| Elective | 3 |
| ---: | ---: | ---: |
| 13 | 10 |

Total Credits: 122-124

Apparel, Merchandising, and Design, B.S. -- Fashion Communications Primary Option

Freshman

| Fall Credits | Spring | Credits |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { A M D } 131^{\text {Fall }} \\ & \text { only } \end{aligned}$ | 3 A M D 275 | 3 |
| A M D 165 | 3 COM S 113 | 3 |
|  | or A M D |  |
|  | 210 |  |
| AESHM 112 | 1 ENGL 250 | 3 |
| AESHM 113N | 1 Select | 3 |
|  | from: |  |

ENGL 1503 MATH 104
LIB $160 \quad 1$ MATH 105
Fashion 3 MATH 140

Communications
Elective (1)
MATH 150
Social 3
Science
Elective



## Graduate Study

The program offers work for the concurrent Bachelor of Science and Master of Science; Master of Science (thesis and non-thesis options; on-campus and hybrid); and Doctor of Philosophy (on-campus and distance hybrid) with a major in apparel, merchandising, and design. For all programs the field of study is highly interdisciplinary; programs of study are tailored to students' background and interests. The program offers a concurrent B.S. and M.S. degree that allows students to obtain both the B.S. and M.S. degrees in apparel, merchandising, and design in 5 years. Application for admission to the Graduate College should be submitted in fall semester of the junior year.

Graduates understand how textiles and apparel are essential in meeting individual and societal needs and understand the interdependence of nations and cultures as producers and consumers. Graduates understand diverse philosophies of scholarship and apply multiple methods to creative activity, research, and teaching. Strong writing and oral communication skills help graduates disseminate scholarship and compete successfully for awards and grants.

Graduates accept positions relevant to their academic experience. All doctoral graduates have teaching experience. Master's and doctoral graduates have experience working in team-oriented and interactive environments. Graduates are prepared to adapt to future changes in their professions and to provide leadership in professional and public practice.

They bring a strong sense of ethics to research, teaching, and business endeavors.

Program emphases for graduate study include creative design and functional design; product development; consumer behavior; entrepreneurship; merchandising and marketing aspects of textiles and clothing; acquisition and use of textiles and apparel within cultures; U.S. dress and textiles from the 19th into the 21 st centuries; textiles and sustainability.

## Courses primarily for undergraduates:

## A M D 120: Apparel Construction Techniques

(3-0) Cr. 3. SS.
Assemble components and completed garments with the use of basic sewing equipment. Learn basic construction techniques, applications and vocabulary. Students will need access to a home sewing machine, iron, computer and the internet. Not available for credit for A M D majors.

## A M D 121: Apparel Assembly Processes

(2-4) Cr. 4. F.S.

## Prereq: A M D 204 concurrent recommended

Principles of garment and textile-related product assembly taught using industrial machines and production equipment. Construction techniques build in complexity in the development, assembly, and analysis of component parts and complete garments.

## A M D 131: Fashion Products and Markets

(3-0) Cr. 3. F.
Fashion industry from concept to consumer. Focus on fashion-driven consumer goods. Development and prototyping of fashion products for a target market.

## A M D 165: Dress, Appearance, and Diversity in Society

(3-0) Cr. 3. F.S.
Examination of dress and appearance practices and experiences of marginalized identities and communities in the United States. Introduction to fashion- and dress-related theories, culture and identity concepts, and social justice concepts and issues in regards to dress, appearance, and fashion in the fashion industry.

Meets U.S. Diversity Requirement

## A M D 178: Introduction to Apparel Design Studio

(1-4) Cr. 3. F.S.
Introduction to the elements and principles of design in fashion and apparel including skill development in fashion illustration, technical drawing, and fabric rendering using traditional media. Application of written and verbal presentations to communicate fashion and apparel design concepts and terminology. Fashion presentation and introduction to portfolio development.

A M D 204: Textile Science
(3-2) Cr. 4. F.S.
Prereq: A M D 131
Textile fibers, yarns, fabrication, coloration, and finishes. Quality and performance application to textile products. Lab work included.

## A M D 206: Design Selective Advancement

Cr. R. Repeatable, maximum of 2 times. F.S.
Prereq: Completion or enrollment in A M D 121, A M D 131, A M D 178, and A
M D 204 and enrollment in major
Project review and skill assessment related to 2-dimensional and 3dimensional visualization, apparel assembly, basic product knowledge, design problem solving, illustration, textiles. Offered on a satisfactory-fail basis only.

## A M D 210: Computer Applications in Digital Design

(2-2) Cr. 3. F.S.
Prereq: A M D 245 or concurrent; AESHM 113N
Applications of skills in Photoshop, Illustrator, InDesign, Google Sketchup, Excel, and website development. Introduction to digital product design and line development. Focus on elements and principles of design. Introduction to digital portfolio development for design and merchandising. In-class demonstrations and online lectures.

## A M D 225: Patternmaking I: Drafting and Flat Pattern

(1-4) Cr. 3. F.S
Prereq: A M D 121, A M D 204, A M D 206
Application of patternmaking tools and their functions, measurement techniques, pattern labeling, and patternmaking communication documents. Sloper drafting and flat pattern manipulation methods for women's apparel. Design and construction of original garments using drafted slopers and flat pattern manipulation methods to enable the analysis of fit.

## A M D 231: Product Development and Manufacturing

(3-2) Cr. 4. F.S.
Prereq: A M D 204
Analysis of apparel product development, sourcing, and manufacturing processes. Focus on materials and specifications relative to quality, performance, cost, and price. Applications of software for PLM.

## A M D 245: Aesthetics and Brand Image

(3-0) Cr. 3. F.S
Prereq: A M D 131, A M D 165, A M D 204 or concurrent
Elements and principles of design. Analysis of sensory, expressive, and symbolic aspects that build brand image, with a focus on fashion products and promotional settings.

## A M D 257: Museum Studies

(3-0) Cr. 3. F.
Prereq: Sophomore standing
Overview of museums including history, functions, and philosophy. Collection and curatorial practices. Funding and governance issues. Hands-on object research and exhibit development. Required field trip.

## A M D 275: Retail Merchandising

(3-0) Cr. 3. F.S.

## Prereq: 3 credits in Math

Principles of merchandising as applied to retail-, service-, events-, and hospitality-related businesses. Study of the planning, development, and presentation of apparel- and hospitality-related products, services, and experiences. Industry and market research, planning of new offerings, and development of promotional and competitive strategies for various retail formats.

## A M D 278: Fashion Illustration

(0-6) Cr. 3. F.S.
Prereq: A M D 178, A M D 210 or concurrent enrollment, A M D 245 or concurrent enrollment. Permission of instructor.

Development of fashion plates and focused apparel lines/collections. Proficiency in drawing the fashion figure, technical drawings/flats, and apparel using a variety of media. Continuation of fashion presentation and portfolio development.

## A M D 290: Independent Study

Cr. 1-2. Repeatable, maximum of 4 credits. F.S.SS.
Prereq: Freshmen or Sophomore Classification; Permission of instructor, adviser, and department chair.
Independent study on topics of special interest to the student, facilitated by approved faculty member. Total number of A M D 290 and A M D 490 credits applied to graduation cannot exceed 9 credits.

## A M D 290R: Independent Study: Professional Practice

Cr. 1-2. Repeatable, maximum of 4 credits. F.S.SS.
Prereq: Freshmen or Sophomore Classification; Permission of instructor, adviser, and department chair.
Experiences in teaching assistantship for first-year and second-year students. Total number of A M D 290 and A M D 490 credits applied to graduation cannot exceed 9 credits.

## A M D 305: Quality Assurance of Textiles and Apparel

(Dual-listed with A M D 505). (2-2) Cr. 3. F.
Prereq: A M D 231, one course in natural science (chemistry with lab preferred); STAT 101, STAT 226, or STAT 401
Principles of product and materials evaluation and quality assurance. Developing specifications and using standard practices for evaluating materials, product characteristics, performance, and quality.

A M D 310: Computer Aided Apparel Patternnmaking
(0-6) Cr. 3. F.S.
Prereq: A M D 210, A M D 225; Permission of instructor.
Computer-aided patternmaking technology used in pattern drafting, grading, marker making, and 3-D virtual prototyping.

A M D 321: Computer Integrated Textile and Fashion Design (0-6) Cr. 3. F.S.
Prereq: A M D 210, A M D 278 or concurrent enrollment. Permission of instructor

Analysis and advanced use of computer-aided design software for textile and fashion design for various target markets. Digital presentation and portfolio development.

## A M D 325: Patternmaking II: Draping

(0-6) Cr. 3. F.S.
Prereq: A M D 206, A M D 225; permission of instructor.
Principles of patternmaking through basic draping techniques on industry standard body forms. Apparel design through analysis of fit and design; problem solving and interaction of fabric characteristics with style features.

## A M D 328: Apparel, Merchandising, and Design Seminar

 Cr. 1-3. Repeatable. F.S.SS.Focus on artisanal textile, apparel, or surface and structural design techniques. Design processes for specialty fabrics and markets. Topics vary by term. Maximum of 6 credits can be applied toward graduation.

A M D 328T: Apparel, Merchandising, and Design Seminar. Fashion Trend Forecasting
Cr. 1-3. F.S.
Focus on artisanal textile, apparel, or surface and structural design techniques. Design processes for specialty fabrics and markets. Topics vary by term. Maximum of 6 credits can be applied toward graduation.

A M D 328Y: Apparel, Merchandising, and Design Seminar: Styling Cr. 1-3.
Focus on artisanal textile, apparel, or surface and structural design techniques. Design processes for specialty fabrics and markets. Topics vary by term. Maximum of 6 credits can be applied toward graduation.

## A M D 329: Digital Textile Printing for Apparel Design

(2-2) Cr. 3. F.S.
Prereq: A M D 321; A M D 325 or concurrent
Overview of the use of digital printing in the textile and apparel industry, color matching, repeat print patterns, engineered prints, and creation of apparel prototypes.

A M D 354: History of European and North American Dress
(3-0) Cr. 3. F.
Prereq: 3 credits from Hist or Art H
Survey of history of dress from ancient times up to the American Civil War; focus on European and North American dress. Emphasis on connection of dress to the social, cultural, environmental, and technological contexts of the Western world.
Meets International Perspectives Requirement.

## A M D 356: History of Twentieth Century Fashion

(3-0) Cr. 3. S.
Prereq: 3 credits HIST or ART H; A M D 204 recommended.
Survey of major design and technological developments from the American Civil War through the 20th Century. Emphasis on fashion as a system of design and production, culture of consumption, fashion change, and trends in art, society, and culture.

## A M D 362: Cultural Perspectives of Dress

(3-0) Cr. 3. S.
Prereq: A M D 165 or 3 credits in anthropology, psychology, or sociology. Analysis of multiple factors related to dress in selected societies, including technology, cultural identity, aesthetics, social organization, ritual, stability and change. Applications to fair trade and social responsibility.
Meets International Perspectives Requirement.

## A M D 372: Sourcing and Global Issues

(3-0) Cr. 3. F.S.
Prereq: A M D 231, A M D 275; ECON 101 or ECON 102 recommended Evaluation of key issues facing textile and apparel industries in global markets considering ethical, economic, political, social, and professional implications. Sourcing strategies in a global environment. Corporate and consumer social responsibility and sustainability.
Meets International Perspectives Requirement.

## A M D 375: Omni-Channel Retailing

(3-0) Cr. 3. S.
Prereq: 3 credits in marketing or A M D 275 or AESHM 287
A customer-centric view of marketing with a focus on the retailercustomer relationship and omni-channel strategies. Analysis and evaluation of integrated retail applications and strategies using digital media, including store formats, e-commerce, catalog, mobile, crowdsourcing, and social media.

## A M D 376: Merchandise Planning and Buying

(3-2) Cr. 4. F.S.
Prereq: A M D 275; COM S 113; 3 credits from ACCT 284, MATH 104, MATH
105, MATH 140, MATH 150, or equivalent.
Calculations and computer application in the planning and control of merchandise. Emphasis on retail math as it pertains to assortment planning, the six-month buying plan process, and other buying concepts and strategies. Online modules.

## A M D 377: Visual Presentation and Promotions

(3-0) Cr. 3. F.S
Prereq: A M D 245 or AESHM 342; AESHM 340 or MKT 340
Principles of visual aspects of brand development and management; emphasis on branding, visual merchandising, design/layout of retail spaces. Includes applications such as visual communication and documentation using Adobe Creative Suite(R), hands-on display projects, and brand case studies.

A M D 393: Apparel, Merchandising, and Design Workshop
Cr. 1-3. Repeatable, maximum of 6 credits. F.S.SS.
Prereq: A M D Junior or Senior Classification and Permission of Instructor. Intensive 2- to 8-week workshop exploration. Topics vary each time offered. Maximum of 6 credits applied to graduation

## A M D 404: Innovative Textiles

(Dual-listed with A M D 504). (2-2) Cr. 3. S.
Prereq: A M D 204, CHEM 163 and CHEM 163L or equivalent
Theories and principles of textile science. Textile product serviceability. Effect of fiber structure on properties and performance. New developments in textiles.

## A M D 415: Technical Design Processes

(2-2) Cr. 3. F.
Prereq: A M D 225; A M D 231
Garment development and analysis of fit, performance, quality, cost. Exploration of alternative materials, construction methods, grading; specifications and portfolio development.

## A M D 426: Creative Design Processes

(1-4) Cr. 3. S
Prereq: A M D 206, A M D 321, A M D 325 or concurrent
Exploration of the creative process and sources of inspiration with emphasis on wearable art; experimentation of advanced design problem solving, alternative materials, fabric manipulation, and pattern-making techniques.

## A M D 431: Apparel Production Management

(2-2) Cr. 3. S.
Prereq: A M D 231; A M D 121 recommended; A M D 372 or concurrent. Procedures and experiences related to application and use of process controls: method analysis, work measurement, costing, pricing, and production planning. Resource management, technology applications, and quality assurance.

## A M D 457: Textile Conservation and Collection Management

(Dual-listed with A M D 557). (3-0) Cr. 3. Alt. F., offered irregularly.Alt. S., offered irregularly.

Prereq: A M D 204
Condition assessment, repair, and stabilization of textiles and apparel in museum collections. Dry and aqueous cleaning. Examination of storage and exhibition techniques, materials, and conditions. Experience with cataloging and management practices.

## A M D 458: Queer Fashions, Styles, and Bodies

(Dual-listed with A M D 558). (3-0) Cr. 3. S.
Prereq: A M D 165; or 3 credits in Women's and Gender Studies or Sociology; or permission of instructor

This course focuses on analyzing the dressed and undressed body of individuals in the queer community in various cultural contexts with a focus on material culture. We will disentangle concepts related to gender and sexuality and the changing definitions and representations of individuals who identify in the queer community focusing on appearance, fashion, and the body. Historic and current representations of fashion, styles, and appearances will be analyzed and discussed. Attention will be paid to how sexuality and gender intersect with and/or shape other identities including race, ability, body size, and class. We will examine the complex structures, systems, and ideologies that uphold discrimination and unequal distribution of power and resources as related to the course material. Attention will mostly be given to North American perspectives. We will use material culture to explore how objects related to fashioning the body reveal stories about the owners and consumers.

A M D 467: Consumer Studies in Apparel and Fashion Products
(3-0) Cr. 3. F.
Prereq: A M D 165; AESHM 340 or MKT 340; STAT 101 or STAT 104 or STAT
226;
Application of concepts and theories from the social sciences to the study of consumer behavior related to dress, textile and apparel products, and retail experiences. Experience in conducting consumer research.

A M D 475: Retail Information Analysis
(2-2) Cr. 3. F.S.
Prereq: A M D 376
Evaluation of information needed to make effective retail decisions. Use of technology in analyzing and interpreting retail systems data. Application of concepts related to forecasting, consumer demand, assortment planning, market research, data mining, database interface, pattern recognition, supply-chain/logistics management, retail technology applications.

## A M D 490: Independent Study

Cr. arr. Repeatable. F.S.SS.
Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair
Independent Study. Maximum of 9 credits of both A M D 290 and A M D 490 can be applied toward graduation.

## A M D 490A: Independent Study: Textile Science

Cr. arr. Repeatable. F.S.SS.
Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

A M D 490B: Independent Study: Historical, Cultural, and Museum Studies of Dress and Textiles

Cr. arr. Repeatable. F.S.SS.
Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

A M D 490C: Independent Study: Textile and Apparel Design
Cr. arr. Repeatable. F.S.SS.
Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

A M D 490E: Independent Study: Merchandising, Aesthetics, and Entrepreneurship
Cr. arr. Repeatable. F.S.SS.
Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

A M D 490F: Independent Study: Sociological, Psychological, and Consumer Behavioral Aspects of Dress

Cr. arr. Repeatable. F.S.SS.
Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

## A M D 490H: Independent Study: Honors

Cr. arr. Repeatable. F.S.SS.
Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

A M D 490J: Independent Study: Product Development, Innovation, and

## Sourcing

Cr. arr. Repeatable. F.S.SS.
Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

## A M D 490R: Independent Study: Professional Practice

Cr. arr. Repeatable, maximum of 2 times. F.S.SS.
Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair.

A M D 490S: Independent Study: Production and Quality Assurance Cr. arr. Repeatable. F.S.SS.
Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

A M D 490W: Independent Study: Fashion Show, Fashion Public Relations and Marketing
Cr. arr. Repeatable. F.S.SS.
Prereq: Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

## A M D 495: Senior Design Studio

(Dual-listed with A M D 595). (0-6) Cr. 3. F.
Prereq: A M D 310, A M D 325 and A M D 329. Permission of instructor.
Creation of an apparel line from target market research to prototypes through the use of manual techniques and CAD technologies. The line is to be included in a professional portfolio and pieces submitted to a juried exhibition.

## A M D 496: Fashion Product Development and Prototyping

(3-0) Cr. 3. S.
Prereq: A M D 231, A M D 245, A M D 275
Applying consumer, aesthetic, and quantitative trend information to develop value-added fashion products and product lines with merchandising/promotion campaigns for diverse target markets. Multifunction team projects. Development of a prototype and presentation to industry representatives.

## A M D 499: Undergraduate Research

Cr. 1-3. Repeatable. F.S.SS.
Prereq: Senior classification, 15 credits in A M D. Permission of instructor, adviser, and department chair
Research experience in textiles and clothing with application to a selected problem.

Courses primarily for graduate students, open to qualified undergraduates:

## A M D 504: Innovative Textiles

(Dual-listed with A M D 404). (2-2) Cr. 3. S.
Prereq: A M D 204, CHEM 163 and CHEM 163L or equivalent
Theories and principles of textile science. Textile product serviceability.
Effect of fiber structure on properties and performance. New developments in textiles.

## A M D 505: Quality Assurance of Textiles and Apparel

(Dual-listed with A M D 305). (2-2) Cr. 3. F.
Prereq: A M D 231, one course in natural science (chemistry with lab preferred); STAT 101, STAT 226, or STAT 401
Principles of product and materials evaluation and quality assurance. Developing specifications and using standard practices for evaluating materials, product characteristics, performance, and quality.

## A M D 510: Foundation of Scholarship in Apparel, Merchandising, and Design

## (3-0) Cr. 3. F.

Prereq: Graduate classification or permission of instructor
Overview of scholarship in apparel, merchandising, and design with emphasis on current and future directions. Fundamentals of writing literature reviews. Examination of ethical issues in scholarship and academic life. Introduction to creativity, sustainability, and entrepreneurship. Development of teaching units.

## A M D 521: Digital Technologies in Textile and Apparel Design

(3-0) Cr. 3. Alt. S., offered even-numbered years.
Prereq: Research Methods course. Permission of instructor.
Digital technologies in textile and apparel design. Theories and practices of mass customization and personalization, digital textile printing, 3D body scanning, creating avatars from body scans, and fitting digital apparel designs.

## A M D 525: Experimental Patternmaking

Cr. 3. Alt. F., offered even-numbered years.
Prereq: AMD 121 or equivalent, AMD 225 or equivalent, AMD 510 or taking concurrently, permission of instructor

Research, analyze, and apply experimental patternmaking techniques to original garments suitable for entry into a juried competition/exhibitions. Compare, contrast, and organize a framework of research patternmaking principles through content analysis or other appropriate research techniques. Documentation of learning and design process.

## A M D 539: Digital Textile Design and Theory

Cr. 3. Repeatable. F.S.SS.
Focus on artisanal textile, apparel, or surface and structural design techniques. Design processes for specialty fabrics and markets. Topics vary by term.

## A M D 545: Consumer Aesthetics and Retail Branding

(3-0) Cr. 3. Alt. S., offered even-numbered years.
Prereq: One course in design elements and principles, psychology, consumer behavior, or marketing

Examination of hedonic nature of consumer experience and its application to experiential design and branding of retail/hospitality establishments. Emphasis on consumer behavior, environmental psychology, and marketing literature.

## A M D 554: Dress History Research Methods

Cr. 3. Alt. S., offered odd-numbered years.
Using a variety of sources and methods of analysis, students will develop their ability to read and interpret primary and secondary sources and to understand the methodology underpinnings and process of constructing dress history.

## A M D 557: Textile Conservation and Collection Management

(Dual-listed with A M D 457). (3-0) Cr. 3. Alt. F., offered irregularly.Alt. S., offered irregularly.
Prereq: A M D 204
Condition assessment, repair, and stabilization of textiles and apparel in museum collections. Dry and aqueous cleaning. Examination of storage and exhibition techniques, materials, and conditions. Experience with cataloging and management practices.

## A M D 558: Queer Fashions, Styles, and Bodies

(Dual-listed with A M D 458). (3-0) Cr. 3. S.
Prereq: A M D 165; or 3 credits in Women's and Gender Studies or Sociology; or permission of instructor

This course focuses on analyzing the dressed and undressed body of individuals in the queer community in various cultural contexts with a focus on material culture. We will disentangle concepts related to gender and sexuality and the changing definitions and representations of individuals who identify in the queer community focusing on appearance, fashion, and the body. Historic and current representations of fashion, styles, and appearances will be analyzed and discussed. Attention will be paid to how sexuality and gender intersect with and/or shape other identities including race, ability, body size, and class. We will examine the complex structures, systems, and ideologies that uphold discrimination and unequal distribution of power and resources as related to the course material. Attention will mostly be given to North American perspectives. We will use material culture to explore how objects related to fashioning the body reveal stories about the owners and consumers.

A M D 565: Sustainability: Theory and Practical Application
(3-0) Cr. 3. Alt. F., offered even-numbered years.
Prereq: 3 credits in research methods; basic knowledge of apparel industry and product development; permission of instructor.

Overview of current sustainability theory, research, and methodology. Emphasis on the evaluation and discussion of current sustainability literature and sustainable practice of apparel, textiles, and related products and services through people, processes, and the environment. Development and presentation of original scholarly and creative design work under various sustainability frameworks.

## A M D 567: Consumer Behavior and Apparel

(3-0) Cr. 3. Alt. F., offered odd-numbered years.
Prereq: A M D 467 or MKT 447; STAT 401
Application of concepts and theories from the social sciences to the study of consumer behavior. Experience in conducting research; manuscript writing.

## A M D 572: Sourcing and Global Issues

(3-0) Cr. 3. Alt. S., offered even-numbered years.
Prereq: A course in merchandising, marketing, or economics
Evaluation of textile and apparel industries in global markets considering ethical, economic, political, social, and professional implications.
Sourcing strategies in a global environment. Corporate and consumer social responsibility and sustainability. Experience in conducting research using secondary data.
Meets International Perspectives Requirement.

A M D 576: Industry Applications in Merchandising and Management (3-0) Cr. 3. Alt. S., offered even-numbered years.
Prereq: A M D 376 or equivalent; A M D 275 or equivalent; or permission of instructor

Using the case study method, students apply merchandising theory, principles, and practices to industry scenarios. Emphasis on problem solving, creative thinking, data analysis, and data interpretation involved in business operations. Focus on the development of leadership skills while functioning in small and large groups.

## A M D 577: E-Commerce for Apparel and Hospitality Companies

(3-0) Cr. 3. Alt. F., offered even-numbered years.
Prereq: Course in marketing or permission of instructor
Analysis of technology and consumer trends, industry practices, and marketing strategies for e-commerce including big data, data mining, and social media. Evaluation and development of apparel or hospitality company websites. Theory application to the development of multichannel business strategies.

## A M D 590: Special Topics

Cr. arr. Repeatable.
Prereq: Permission of director of graduate education, adviser, and instructor(s)
Individually designed A M D-related projects that reflect the special interests of the student.

## A M D 590A: Special Topics: Textile Science

Cr. arr. Repeatable.
Prereq: Permission of director of graduate education, adviser, and instructor(s)
Individually designed A M D-related projects that reflect the special interests of the student.

A M D 590B: Special Topics: Historical, Cultural, and Museum Studies of Dress and Textiles
Cr. arr. Repeatable.
Prereq: Permission of director of graduate education, adviser, and instructor(s)
Individually designed A M D-related projects that reflect the special interests of the student.

## A M D 590C: Special Topics: Textile and Apparel Design

Cr. arr. Repeatable.
Prereq: Permission of director of graduate education, adviser, and instructor(s)
Individually designed A M D-related projects that reflect the special interests of the student.

## A M D 590E: Special Topics: Merchandising, Aesthetics, and Entrepreneurship

Cr. arr. Repeatable.
Prereq: Permission of director of graduate education, adviser, and instructor(s)
Individually designed A M D-related projects that reflect the special interests of the student.

## A M D 590F: Special Topics: Sociological, Psychological, and Consumer Behavioral Aspects of Dress

Cr. arr. Repeatable.
Prereq: Permission of director of graduate education, adviser, and instructor(s)
Individually designed A M D-related projects that reflect the special interests of the student.

## A M D 590J: Special Topics: Product Development, Innovation, and Sourcing <br> Cr. arr. Repeatable. F.S.SS. <br> Prereq: Permission of director of graduate education, adviser, and instructor(s) <br> Individually designed A M D-related projects that reflect the special interests of the student.

A M D 590S: Special Topics: Production and Quality Assurance Cr. arr. Repeatable. F.S.SS.
Prereq: Permission of director of graduate education, adviser, and instructor(s)

Individually designed A M D-related projects that reflect the special interests of the student.

## A M D 590W: Special Topics: Fashion Show, Fashion Public Relations and Marketing

Cr. arr. Repeatable. F.S.SS.
Prereq: Permission of director of graduate education, adviser, and instructor(s)

Individually designed A M D-related projects that reflect the special interests of the student.

## A M D 595: Senior Design Studio

(Dual-listed with A M D 495). (0-6) Cr. 3. F.
Prereq: A M D 310, A M D 325 and A M D 329. Permission of instructor.
Creation of an apparel line from target market research to prototypes through the use of manual techniques and CAD technologies. The line is to be included in a professional portfolio and pieces submitted to a juried exhibition.

## A M D 599: Creative Component

Cr. arr. Repeatable.
Prereq: 9 graduate credits in A M D

Courses for graduate students:

## A M D 611: Seminar

Cr. 1-3. Repeatable.
Prereq: 6 graduate credits in A M D. Permission of instructor
Discussion of scholarship and current issues. Topics vary.

## A M D 625: Design Theory and Process

(2-4) Cr. 4. Alt. S., offered odd-numbered years.
Prereq: Permission of instructor.
Analysis and application of design theory and creative processes, including strategies for solving aesthetic, functional, and/or technologyfocused design problems. Creation and dissemination of design scholarship.

## A M D 665: Social Science Theories of Appearance

(3-0) Cr. 3. Alt. S., offered odd-numbered years.
Prereq: 6 credits in sociology or psychology
Analysis of social science theories and concepts applicable to appearance research. Emphasis on qualitative research and philosophy of knowledge, including postmodern, symbolic interaction, semiotic, and feminist theories. Collection and analysis of qualitative data.

## A M D 676: Merchandising Theory and Research Applications

(3-0) Cr. 3. Alt. F., offered even-numbered years.
Prereq: A M D 275 or equivalent; statistics course recommended. Review of current merchandising theory, research, and methodology. Emphasis on the evaluation and discussion of current and seminal merchandising literature, understanding research processes, interpretation of findings, assessing implications of research for future directions in merchandising, and the development and presentation of original scholarly work.

## A M D 690: Advanced Topics

Cr. arr. Repeatable.
Prereq: Enrollment in doctoral program, permission of instructor; and approval of D.O.G.E

## A M D 699: Research

Cr. arr. Repeatable.

