# 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). 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 the 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, or fashion communication.

Minors and a certificate are available in apparel, merchandising, and design: (a) textile science and product performance or (b) 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 (AMD). 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.

The AMD major provides a broad-based program of study with flexibility in creating an individualized program. To complete the program, a student combines general education, AMD core classes, and a structure of focused courses to form an option in: (a) creative and technical design, (b) fashion communication, (c) product development and innovation, (d) product management and sourcing, or (e) merchandising and retail analytics.

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. The fashion communications option 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 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 soft-goods for home. Career opportunities include designer, materials testing, quality assurance, and technical design. The product management and sourcing option is appropriate for those interested in both line planning, product development, and merchandising products or lines for consumer groups, sourcing, quality assurance, and manufacturing. 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.
***Instead of a portfolio review for admission, students in the creative and technical design option have a review of their first year design skills (AMD 206 Design Selective Advancement) after completing AMD 121 Apparel Assembly, AMD 131 Overview of the Fashion Industry, AMD 178 Introduction to Fashion Design Studio, and AMD 204 Textile Science. The AMD 206 Design Selective Advancement project is scored by design industry professionals and determines if/when students move forward into the creative and technical design option.

The AMD 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 five 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 AMD 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.

## Apparel, Merchandising, and Design Minor

A minor in Apparel, Merchandising, and Design requires (15-17 cr.) of the following:

Select from:

| 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 |


| Select from: |  | $3-4$ |
| :---: | :--- | :---: |
| A M D 204 | Textile Science | $3-4$ |
| 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 |  |
| $300-400$ 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 Appare

A M D 328 Apparel, Merchandising, and Design Semina
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 458 Queer Fashions, Styles, and Bodies
A M D 467 Consumer Studies in Apparel and Fashion Products

A M D 475 Retail Information Analysis
A M D 490 Independent Study

A M D 499
Undergraduate Research
Total Credits
15-17

## Fashion, Culture, history, and Social Justice Minor

The Fashion, Culture, History, and Social Justice minor can be earned by successfully completing the following for a total of 15 credits. All course prerequisites must be completed prior to taking the course. All minor courses must be taken for a grade.
Required course: 3

A M D 165 Dress, Appearance, and Diversity in Society
Select from: 6

| A M D 354 | History of European and North American Dress |
| :--- | :--- |
| A M D 366X | History of Menswear |
| A M D 356 | History of Twentieth Century Fashion |
| A M D 458 | Queer Fashions, Styles, and Bodies |
| AESHM 462X | Black Lives Matter. Fashion, Politics, and |
|  | Resistance Movements |

Select from:
African and African American Studies

| AF AM 201 | Introduction to African American Studies |
| :--- | :--- |
| AF AM 311 | Africa under Colonial Rule |
| AF AM 325 | Peoples and Cultures of Africa. |
| AF AM 330 | Ethnic and Race Relations |
| AF AM 334 | Africana Religions |
| AF AM 347 | Studies in African American Literature |
| AF AM 350 | Women of Color in the U.S |
| AF AM 353 | History of African Americans I |
| AF AM 354 | History of African Americans II |
| AF AM 473 | Civil Rights and Ethnic Power |

American Indian Studies

| AM IN 201 | Native People in American Culture |
| ---: | :--- |
| AM IN 205 | American Indians in the Movies |
| AM IN 210 | Introduction to American Indian Studies |
| AM IN 225 | American Indians of Iowa |
| AM IN 310 | Contemporary Topics in American Indian Studies |
| AM IN 322 | Peoples and Cultures of Native North America |
| AM IN 332 | Current Issues in Native North America |
| AM IN 346 | American Indian Literature |
| Anthropology |  |
| ANTHR 225 | American Indians of Iowa |
| ANTHR 322 | Peoples and Cultures of Native North America |
| ANTHR 325 | Peoples and Cultures of Africa. |


| ANTHR 332 | Current Issues in Native North America |
| :---: | :---: |
| ANTHR 444 | Cross-cultural Perspectives on Gender and Sexuality |
| American Sign Language |  |
| ASL 107 | Introduction to the Deaf-World |
| ASL 275 | Topics in Deaf Culture |
| ASL 325 | Deaf Peoples: Pre-World War II |
| Apparel, Mercahndising, and Design |  |
| A M D 362 | Cultural Perspectives of Dress |
| Arabic |  |
| ARABC 375 | Arab Culture |
| Architecture |  |
| ARCH 426 | Topics in Native American Architecture |
| Art History |  |
| ART H 382 | Art and Architecture of Asia |
| ART H 384 | Art of Islam |
| ART H 494 | Women/Gender in Art |
| Chinese |  |
| CHIN 272 | Introduction to Chinese Culture |
| CHIN 370 | Chinese Literature in English Translation |
| CHIN 375 | China Today |
| CHIN 378 | Chinese Film and Society |
| CHIN 403 | Seminar in Chinese Language and Culture |
| Classical Studies |  |
| CL ST 374 | Sex, Gender, and Culture in the Ancient Mediterranean World |
| Economics |  |
| ECON 321 | Economics of Discrimination |
| English |  |
| ENGL 340 | Women's Literature |
| ENGL 344 | U.S. Latino/a Literature |
| ENGL 346 | American Indian Literature |
| ENGL 347 | Studies in African American Literature |
| ENGL 352 | Gay and Lesbian Literature |
| History |  |
| HIST 207 | Chinese Civilization |
| HIST 255 | Introduction to World History, 1500-Present |
| HIST 331 | History of the Islamic World to 1800 |
| HIST 336 | History of Modern China I |
| HIST 337 | History of Modern China II |
| HIST 338 | Modern Japanese History |
| HIST 340 | History of Latin America I |
| HIST 341 | History of Latin America II |


| HIST 353 | History of African Americans I |
| :---: | :---: |
| HIST 354 | History of African Americans II |
| HIST 371 | Mexican American History |
| HIST 372 | Latina/o History |
| HIST 374 | Sex, Gender, and Culture in the Ancient Mediterranean World |
| HIST 380 | History of Women in Science, Technology, and Medicine |
| HIST 386 | History of Women in America |
| HIST 410 | The Holocaust in History |
| HIST 435 | History of the Modern Middle East |
| HIST 441 | History of Modern Mexico and Central America |
| HIST 457 | History of American Sexualities |
| HIST 465 | The American West |
| HIST 473 | Civil Rights and Ethnic Power |
| Leadership Studies |  |
| LD ST 333 | Women and Leadership |
| LD ST 488 | Research on Women and Leadership |
| Philosphy |  |
| PHIL 235 | Ethical Issues in a Diverse Society |
| PHIL 338 | Feminist Philosophy |
| Polical Science |  |
| POL S 385 | Women in Politics |
| Psychology |  |
| PSYCH 346 | Psychology of Women |
| PSYCH 347 | U.S. Latino/a Psychology |

Religious Studies

| RELIG 210 | Religion in America |
| :--- | :--- |
| RELIG 328 | Native American Religions (RELIG 333) |
| RELIG 334 | Africana Religions |
| RELIG 336 | Religion and Gender |
| RELIG 342 | Religion and U.S. Latino/a Literature |
| RELIG 352 | Religions of India |
| RELIG 358 | Islam |

Sociology

| SOC 235 | Social Problems and American Values |
| :--- | :--- |
| SOC 327 | Sex and Gender in Society |
| SOC 330 | Ethnic and Race Relations |
| SOC 331 | Social Class and Inequality |
| SOC 332 | The Latino/Latina Experience in U.S. Society |
| SOC 350 | Women in Agriculture and the Food System |
| U.S. Latino/a Studies |  |
| US LS 211 |  |


| US LS 323A | Latin American Anthropology: Violence and Memory |
| :---: | :---: |
| US LS 323B | Latin American Anthropology: Social movements and Democracy |
| US LS 323C | Latin American Anthropology: Race, Class and Gender |
| US LS 323D | Latin American Anthropology: Regional Focus |
| US LS 323E | Latin American Anthropology: Culture and Sport. |
| US LS 342 | Religion and U.S. Latino/a Literature |
| US LS 343 | Latin American Government and Politics |
| US LS 347 | U.S. Latino/a Psychology |
| US LS 371 | Mexican American History |
| US LS 372 | Latina/o History |
| US LS 473 | Civil Rights and Ethnic Power |
| Women's and Gender Studies |  |
| WGS 201 | Introduction to Women's and Gender Studies |
| WGS 203 | Introduction to Lesbian Studies |
| WGS 205 | Introduction to Queer Studies |
| WGS 210 | Gender and Sexuality in American Pop Culture |
| WGS 301 | International Perspectives on Women and Gender |
| WGS 320 | Ecofeminism |
| WGS 321 | Economics of Discrimination |
| WGS 323 | Gender and Communication |
| WGS 325 | Portrayals of Gender and Sexualities in the Media |
| WGS 327 | Sex and Gender in Society |
| WGS 333 | Women and Leadership |
| WGS 336 | Religion and Gender |
| WGS 338 | Feminist Philosophy |
| WGS 340 | Women's Literature |
| WGS 346 | Psychology of Women |
| WGS 350 | Women of Color in the U.S |
| WGS 352 | Gay and Lesbian Literature |
| WGS 374 | Sex, Gender, and Culture in the Ancient Mediterranean World |
| WGS 380 | History of Women in Science, Technology, and Medicine |
| WGS 385 | Women in Politics |
| WGS 386 | History of Women in America |
| WGS 435 | Gender, Globalization and Development |
| WGS 444 | Cross-cultural Perspectives on Gender and Sexuality |
| WGS 457 | History of American Sexualities |
| WGS 488 | Research on Women and Leadership |


| WGS 494 | Women/Gender in Art |
| :---: | :--- |
| World Languages and Cultures |  |
| WLC 352 | Religions of India |
| WLC 358 | Islam |

## merchandising 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 (AESHM). 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). Leads to the degree Bachelor of Science. Administered by the AESHM Department. All students majoring in Apparel, Merchandising, and Design (AMD) are required to earn a C- or better in all AMD, AESHM, EVENT, and HSP M courses applied toward the degree, including transfer credits. All students majoring in Apparel, Merchandising, and Design (AMD) are required to earn a C or better in ENGL 150 and ENGL 250. No courses may be applied to more than one degree requirement except those used to meet US Diversity and International Perspective requirements.

## Cr. Degree Requirements



| 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 one (1) course: | 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 one (1) course: |  |  |
| A M D 354 | History of European and North American Dress |  |
| A M D 362 | Cultural Perspectives of Dress |  |
| A M D 366X | History of Menswear |  |
| A M D 458 | Queer Fashions, Styles, and Bodies |  |
| A M D 462X | Black Lives Matter: Fashion, Liberation, and the |  |

Select two (2) courses:
AMD, AESHM, THTRE, ART IS, DSGN, or DSN S.
This category can be used to fulfill approved double major or minor requirements

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 225 | Patternmaking I: Drafting and Flat Pattern | 3 |
| or 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 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) courses: 9

AMD, AESHM, CHEM, GLOBE, IND D, TSM, or ENV S.
This category can be used to fulfill approved double major or minor requirements

Total Credits
Product Management 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 | 3 |
|  | Product Development |  |


| 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 <br>  <br>  <br> Products | 3 |
| A M D 496 | Fashion Product Development and Prototyping | 3 |
| AESHM 340 | Hospitality and Apparel Marketing Strategies | 3 |
| or MKT 340 | Principles of Marketing |  |
| ACCT 284 | Financial Accounting | 3 |
| SCM 301 | Supply Chain Management | 3 |
| Select one (1) course: | 3 |  |

## AESHM, A M D, ENV S, GLOBE, or TSM.

This category can be used to fulfill approved double major or minor requirements

## Total Credits

| Merchandising and Retail Analytics Primary Option |  |  |
| :---: | :---: | :---: |
| ACCT 284 | Financial Accounting | 3 |
| AESHM 340 <br> or MKT 340 | Hospitality and Apparel Marketing Strategies Principles of Marketing | 3 |
| AESHM 474 | Entrepreneurship in Human Sciences | 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 388X | Trend Forecasting | 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) courses from: |  | 12 |
| AESHM or A M D |  |  |
| This category minor requirem | can be used to fulfill approved double major or ents |  |

## Total Credits

## Fashion Communication Primary Option

ACCT 284 Financial Accounting
$\left.\begin{array}{clr}\text { or AESHM } 175 \text { NFinancial Applications for Retail and Hospitality } \\ & \\ \text { Industries: Retail Merchandising }\end{array}\right]$

| A M D 376 | Merchandise Planning and Buying |  |  | 4 |
| :---: | :---: | :---: | :---: | :---: |
| A M D 377 | Visual Presentation and Promotions |  |  | 3 |
| A M D 388X | Trend Forecasting |  |  | 3 |
| EVENT 171 | Introduction to Event Management |  |  | 3 |
| EVENT 277 | Introduction to Digital Promotion in Event Management |  |  | 3 |
| Select one (1) course from: |  |  |  | 3 |
| AESHM or A M D |  |  |  |  |
| This category can be used to fulfill approved double major requirements, including ADVRT, COM ST, D S, ENTSP, EVENT, JL MC, MKT, and PR |  |  |  |  |
| Select two (2) courses from: |  |  |  | 6 |
| Approved minor or double major, including ADVRT, COM ST, D S, EVENT, JL MC, PR, or Technical Communications. |  |  |  |  |
| Total Credits |  |  |  |  |
| Apparel Merchandising, Design B.S. - Creative and Technical Design |  |  |  |  |
| Primary Option |  |  |  |  |
| Freshman |  |  |  |  |
| Fall | Credits | Spring | Credits |  |
| ENGL 150 |  | 3 ENGL 250 | 3 |  |
| AMD 131 |  | 3 MATH 140 | 3 |  |
| (Fall only) |  |  |  |  |
| A M D 165 |  | 3 A M D 121 | 4 |  |
| A M D 178 |  | 3 A M D 204 | 4 |  |
| AESHM |  | 1 A M D 206 | R |  |
| 111X |  |  |  |  |
| AESHM 111L |  | 1 A M D 245 | 3 |  |
| LIB 160 |  | 1 |  |  |
|  |  | 5 | 17 |  |
| Sophomore |  |  |  |  |
| Fall <br> A M D 210 | Credits | Spring | Credits |  |
|  |  | 3 A M D 225 | 3 |  |
| A M D 275 |  | 3 AESHM 211 | 3 |  |
| A M D 278 |  | 3 ART H 281 | 3 |  |
| Humanities |  | 3 COM S 113 | 3 |  |
| \& Social |  |  |  |  |
| Science |  |  |  |  |
| Choice |  |  |  |  |
| CHEM 163 |  | 4 ECON 101 | 3 |  |
| CHEM 163L |  | 1 |  |  |
|  |  | 7 | 15 |  |






## 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 165, A M D 178, and A M D 204 with subset 2.5 GPA, 2.0 cumulative GPA (including transfer work), 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. Grade point averages are part of scoring process. 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. Permission of instructor. 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, advisor, 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, advisor, 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 204, A M D 231, one course in natural science; STAT 101, or STAT 226, or STAT 587
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, 3-D virtual prototyping digitizing, and apparel design.

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 softgood fabrication design for various target markets. Development of digital presentation for portfolio integration.

## 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

 ForecastingCr. 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. Permission of instructor
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; A M D 210, 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, advisor, 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, advisor, 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, advisor, 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, advisor, 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, advisor, and department chair

## A M D 490F: Independent Study: Sociological, Psychological, and Consumer Behavioral Aspects of Dress <br> Cr. arr. Repeatable. F.S.SS. <br> Prereq: 6 credits in A M D. Permission of the instructor, advisor, 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, advisor, 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, advisor, 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, advisor, 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, advisor, 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, advisor, 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 226X, A M D 231, A M D 245, A M D 275; A M D 305
recommended
Strategically plan, prototype, evaluate, and source an innovative product for a specific target market through design thinking and practice. 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; industry product development competition(s). 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, advisor, 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 204, A M D 231, one course in natural science; STAT 101, or STAT 226, or STAT 587

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. F., offered odd-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, advisor, 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, advisor, 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, advisor, 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, advisor, 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, advisor, 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, advisor, 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

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

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, advisor, 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, advisor, 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.

