

**FCS 185 Science of Human Nutrition (3)**  
 3 hours lecture  
**Note:** Cross listed as BIOL 185  
**Transfer acceptability:** CSU; UC – FCS 165, FCS 185, BIOL 185, HE 165 combined: maximum credit, one course  
 Science of food, nutrients, and other substances therein; processes by which the organism ingests, digests, absorbs, transports, utilizes, and excretes food substances. Emphasis on biological, chemical, and physiological implications to human nutrition.

**FCS 197 Family and Consumer Sciences Workshop (.5-3)**  
 Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 3 times  
**Transfer acceptability:** CSU  
 Materials relative to the field of Family and Consumer Sciences.

**FCS 295 Directed Study in Family and Consumer Sciences (1,2,3)**  
 3, 6, or 9 hours laboratory  
**Prerequisite:** Approval of project or research by department chairperson/director  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Independent study for students who have demonstrated skills and/or proficiencies in Family and Consumer Sciences subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

## Fashion (FASH)

Contact the Design and Consumer Education Department for further information.  
 (760) 744-1150, ext. 2349  
 Office: ST-49  
 For transfer information, consult a Palomar College Counselor.

### Associate in Arts Degrees -

AA Degree requirements are listed in Section 6 (green pages).  
 • Fashion Design/Technical  
 • Fashion Merchandising/Technical

### Certificates of Achievement -

Certificate of Achievement requirements are listed in Section 6 (green pages).  
 • Fashion Design/Entry-Level  
 • Fashion Merchandising/Entry-Level

### Certificates of Proficiency -

Certificate of Proficiency requirements are listed in Section 6 (green pages).  
 • Fashion Merchandising Sales Associate

## PROGRAMS OF STUDY

### Fashion Design/Entry-Level

This certificate is intended to prepare students for entry-level positions in fashion design. It is intended to be completed in one year of full-time attendance at Palomar College. Employment might include seamstress, alterationist, assistant designer, and sample cutter.

#### CERTIFICATE OF ACHIEVEMENT

Program Requirements	Units
FASH 100 Fashion Industry	3
FASH 105 Fashion Analysis and Clothing Selection	3
FASH 110 Textiles	3
FASH 135 Basic Sewing Construction	3
FASH 136 Advanced Sewing Construction	3

FASH 139 Pattern Making/Fashion Design	3
FASH 145 Fashion Illustration and Presentation	4
FASH 148 Digital Design for Fashion	3
FASH 195 Field Studies in Fashion	2
CE 150 Internship	2-3
<b>TOTAL UNITS</b>	<b>29 - 30</b>

Recommended Elective: FASH 146

### Fashion Design/Technical

Courses required for employment in the fashion industry; specifically in pattern making, sample work, fashion design, and illustration.

Students should be aware that not all Fashion courses are offered every semester. See Class Schedule or Department Chairperson for additional information.

## A.A. DEGREE MAJOR

Program Requirements	Units
BMGT 105 or Small Business Management	
BUS 155 Marketing	3
FASH 100 Fashion Industry	3
FASH 105 Fashion Analysis/Clothing Selection	3
FASH 110 Textiles	3
FASH 130 History of Fashion/Costume	3
FASH 135 Basic Sewing Construction	3
FASH 136 Advanced Sewing Construction	3
FASH 139 Pattern Making/Fashion Design	3
FASH 141 Adv Patternmaking/Fashion Design	3
FASH 145 Fashion Illustration/Presentation	4
FASH 146 Computer Aided Design (CAD) for Fashion	3
FASH 148 Digital Design for Fashion	3
FASH 165 Sewing Laboratory	1
FASH 166 Tailoring Laboratory	.5
FASH 167 Pattern-Making Laboratory	.5
FASH 168 CAD Laboratory	.5
FASH 195 Field Studies in Fashion	2
CE 150 Internship	2-3
<b>TOTAL UNITS</b>	<b>43.5 - 44.5</b>

Recommended Electives: FASH 125/BUS 145, FASH 132, 147, 170

### Fashion Merchandising/Entry-Level

This certificate is intended to prepare students for entry-level positions in fashion merchandising, such as sales associate, display stylist, and assistant manufacturer's representative. It is intended to be completed in one year of full-time attendance at Palomar College.

#### CERTIFICATE OF ACHIEVEMENT

Program Requirements	Units
FASH 100 Fashion Industry	3
FASH 105 Fashion Analysis/Clothing Selection	3
FASH 110 Textiles	3
FASH 115 Visual Merchandising I	3
FASH 125/ BUS 145 Retailing/Promotion	3
FASH 148 Digital Design for Fashion	3
FASH 175 Analysis, Evaluation, and Comparison of Ready-to-Wear	3
FASH 195 Field Studies in Fashion	2
CE 150 Internship	2-3
<b>TOTAL UNITS</b>	<b>25 - 26</b>

Recommended Electives: FASH 130, 155

## Fashion Merchandising Sales Associate

This certificate is intended to prepare students for immediate employment in the fashion industry as a sales associate. It is intended to be completed in one semester.

### CERTIFICATE OF PROFICIENCY

Program Requirements		Units
FASH 100	Fashion Industry	3
FASH 105	Fashion Analysis/Clothing Selection	3
FASH 115	Visual Merchandising I	3
<b>TOTAL UNITS</b>		<b>9</b>

## Fashion Merchandising/Technical

The Fashion Merchandising A.A. degree program provides students with an option for a career or the requisite foundation for transfer to a four-year college or university. Careers might include assistant buyer, assistant department manager, small store owner, visual merchandiser, advertising consultant, fashion coordinator, promotion coordinator, sales associate, or manufacturer's sales representative.

Students should be aware that not all Fashion courses are offered every semester. See Class Schedule or Department Chairperson for additional information.

### A.A. DEGREE MAJOR

Program Requirements		Units
BMGT 105 or	Small Business Management	
BUS 155	Marketing	3
FASH 100	Fashion Industry	3
FASH 105	Fashion Analysis/Clothing Selection	3
FASH 110	Textiles	3
FASH 115	Visual Merchandising I	3
FASH 120	Fashion Buying/Management	3
FASH 125/ BUS 145	Retailing/Promotion	3
FASH 126	Fashion Show Promotion	1
FASH 130	History of Fashion/Costume	3
FASH 145	Fashion Illustration and Presentation	4
FASH 148	Digital Design for Fashion	3
FASH 175	Analysis, Evaluation, and Comparison of Ready-to-Wear	3
FASH 195	Field Studies in Fashion	2
CE 150	Internship	2-3
<b>TOTAL UNITS</b>		<b>39 - 40</b>

Recommended Electives: FASH 116, 132, 155; BUS 155

### COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

**FASH 90 Design Collection (1)**  
2 hours lecture/laboratory

**Recommended preparation:** At least one of the following courses: FASH 135, 136, 139, 145

**Note:** May be taken 3 times

Lab course for fashion show line designers in any clothing category of women's, men's, and children's wear.

**FASH 100 Fashion Industry (3)**  
3 hours lecture

**Transfer acceptability:** CSU

A study of the background and technology of the clothing industry. Includes contemporary problems of production and distribution; emphasis is on career options in the fashion industry.

**FASH 105 Fashion Analysis and Clothing Selection (3)**  
3 hours lecture

**Transfer acceptability:** CSU; CAN FCS 20

Examines fashion as it relates to wardrobe planning, coordination, and standards of quality garment construction.

**FASH 110 Textiles (3)**  
3 hours lecture-1 hour laboratory

**Transfer acceptability:** CSU; CAN FCS 6

Fibers, yarn, fabric construction, and finishes as related to selection, use, and care.

**FASH 115 Visual Merchandising I (3)**  
3 hours lecture-1 hour laboratory

**Transfer acceptability:** CSU

Visual merchandise presentation including window and interior displays, elements of design, principles of design, fixtures, lighting, and other display materials.

**FASH 116 Visual Merchandising II (3)**  
3 hours lecture-1 hour laboratory

**Transfer acceptability:** CSU

Advanced visual design and application. Hands on experience in merchandise presentation and display; basic drafting techniques and drafting tools related to store planning and visual merchandising.

**FASH 120 Fashion Buying/Management (3)**  
3 hours lecture

**Transfer acceptability:** CSU

Principles of fashion buying utilizing practical applications and case studies. Topics covered include merchandise planning and selection, resource relations, legal trade regulations, pricing, and merchandise management and control.

**FASH 125 Retailing/Promotion (3)**  
3 hours lecture

**Note:** Cross listed as BUS 145

**Transfer acceptability:** CSU

Principles and techniques of retailing, promotion, and advertising pertinent to retail policies and procedures. Includes psychological aspect of retailing. Working foundation for those looking forward to employment in this area.

**FASH 126 Fashion Show Presentation (1)**  
2 hours lecture/laboratory

**Note:** May be taken 2 times

**Transfer acceptability:** CSU

Applied study and practical application of fashion show and special event production and promotional skills. Strategies and techniques studied include organizing, advertising, staging, timing, and coordinating models and their clothing and accessories. Produce the Fashion Merchandising/Fashion Design program's annual fashion show.

**FASH 130 History of Fashion/Costume (3)**  
3 hours lecture

**Transfer acceptability:** CSU

Styles of dress from the Paleolithic period to the present as depicted in art forms and other media. Focuses on Western European costume.

**FASH 131 Elementary Stage Costume and Make Up (3)**  
2 hours lecture-3 hours laboratory

**Transfer acceptability:** CSU

Basic theories, techniques, and procedures of costume production and make up application for stage, film, and television. Practical training in college productions.

**FASH 132 Costume and Culture (3)**  
3 hours lecture

**Transfer acceptability:** CSU; UC

Patterns of dress and human adornment of three cultures: African, Asian/Pacific Islanders and the Americas. Socio-cultural developments in dress. Clothing images and meaning in a contemporary multicultural American society.

- FASH 135 Basic Sewing Construction (3)**  
*6 hours lecture/laboratory*  
**Corequisite:** FASH 165  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
 Traditional construction techniques. Quality garments will be produced utilizing new speed techniques as well as hand detailing.
- FASH 136 Advanced Sewing Construction (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** FASH 135  
**Corequisite:** FASH 165  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
 Sewing construction techniques beyond basic level, with increased difficulty in pattern assembly.
- FASH 137 Tailoring (3)**  
*6 hours lecture/laboratory*  
**Corequisite:** FASH 166  
**Recommended preparation:** FASH 135 and 136  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
 Clothing principles emphasizing techniques in handling difficult fabrics. Principles of tailoring; planning and construction of suits and coats.
- FASH 139 Pattern Making/Fashion Design (3)**  
*6 hours lecture/laboratory*  
**Corequisite:** FASH 167  
**Recommended preparation:** FASH 135  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
 Pattern making through the flat pattern design method. Attention is given to design analysis and interpretation of design; application of design method in the development, presentation, and construction of original garments.
- FASH 141 Advanced Pattern Making/Fashion Design (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** FASH 139  
**Corequisite:** FASH 167  
**Recommended preparation:** FASH 135  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Advanced design skills for the fashion industry. Examination of one method of pattern development: draping. Creation of patterns to drape and fit on a dressmaker's form.
- FASH 145 Fashion Illustration and Presentation (4)**  
*3 hours lecture-3 hour laboratory*  
**Transfer acceptability:** CSU  
 Fundamentals in drawing of fashion figures and in illustration of fashion garments. Development of individual skills and style in graphic presentation.
- FASH 146 Computer Aided Design (CAD) for Fashion (3)**  
*6 hours lecture/laboratory*  
**Corequisite:** FASH 168  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
 An introduction to computer aided pattern making for fashion using CAD technology. Hands-on experience with CAD technology to include the following operations: preparing and editing patterns; storage and retrieval of patterns, production of fashion industry patterns.
- FASH 147 Advanced Computer Aided Design (CAD) for Fashion (3)**  
*6 hours lecture/laboratory*  
**Prerequisite:** FASH 146  
**Corequisite:** FASH 168  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU
- Advanced theory and hands-on operation of CAD systems for fashion pattern making including pattern making blocks, grading, and marker making. Emphasis is placed on productivity and manufacturability for the fashion design industry.
- FASH 148 Digital Design for Fashion (3)**  
*6 hours lecture/laboratory*  
**Note:** May be taken 2 times  
**Transfer acceptability:** CSU  
 Design and illustrate fashion sketches, storyboards, and patterns using Adobe Illustrator and Adobe Photoshop. Development of individual skills and style in graphic presentations.
- FASH 155 World of Fashion (2,3)**  
*4 or 6 hours lecture/laboratory*  
**Note:** Fee charged; may be taken 4 times  
**Transfer acceptability:** CSU  
 Extended field studies in textiles, design, manufacturing, forecasting, and retail practices as they apply to the national and international fashion industry. Emphasis upon field observation and examination of the fashion trends as they interrelate with the social, political, psychological, economic, and historical influences to create the fashion ambience. Geographical locations may vary.
- FASH 165 Sewing Laboratory (1)**  
*3 hours laboratory*  
**Corequisite:** FASH 135 or 136  
**Note:** Credit/No Credit grading only; may be taken 4 times  
**Transfer acceptability:** CSU  
 Enhancement of sewing skills by supervised practice and active participatory experience in individual study. Content to be determined by the need of the student in agreement and under observation and direction of the instructor.
- FASH 166 Tailoring Laboratory (.5)**  
*1 1/2 hours laboratory*  
**Corequisite:** FASH 137  
**Recommended Preparation:** FASH 135  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Enhancement of tailoring skills by supervised practice and active participatory experience in individual study. Content to be determined by the need of the student in agreement and under observation and direction of the instructor.
- FASH 167 Pattern-Making Laboratory (.5)**  
*1 1/2 hours laboratory*  
**Corequisite:** FASH 139 or 141  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Enhancement of pattern-making skills by supervised practice and active participatory experience in individual study. The specific content to be determined by the need of the student in agreement and under observation and direction of the instructor.
- FASH 168 CAD Laboratory (.5)**  
*1 1/2 hours laboratory*  
**Corequisite:** FASH 146 or 147  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Enhancement of CAD (Digital Design for Fashion) skills by supervised practice and active participatory experience in individual study. Specific content to be determined by the need of the student in agreement and under observation and direction of the instructor.
- FASH 170 Introduction to Fabric Design/Painting (3)**  
*6 hours lecture/laboratory*  
**Transfer acceptability:** CSU  
 Traditional and contemporary methods in the application of fabric dyes and paints using fundamental design principles for textiles and clothing.

**FASH 175 Analysis, Evaluation, and Comparison of Ready-to-Wear (3)**

3 hours lecture

**Transfer acceptability:** CSU

Analysis of the quality of materials, design, and construction in ready-to-wear garments and accessories; comparison of processes involved in manufacturing; concepts of sizing; principles of fit; and aids in buying and selling.

**FASH 195 Field Studies in Fashion (2)**

4 hours lecture/laboratory

**Note:** May be taken 2 times**Transfer acceptability:** CSU

Fashion industry on site: process of designing, manufacturing, marketing, and merchandising of fashion apparel and related accessories.

**FASH 196A Special Problems in Computer Aided Pattern Drafting (1,2,3)**

3, 6, or 9 hours laboratory

**Note:** May be taken 4 times**Transfer acceptability:** CSU

Advanced research project using AutoCAD and BetaCAD software. Content to be determined by the need of the student under signed contract with the instructor.

**FASH 197A Fashion Merchandising Workshop (.5-3)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times**Transfer acceptability:** CSU

Covers areas of the fashion merchandising industry which are rapidly changing or require current short term specific training.

**FASH 197B Fashion Manufacturing Workshop (.5-3)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times**Transfer acceptability:** CSU

Covers areas of the fashion manufacturing industry which are rapidly changing or require current short term specific training.

**FASH 197C Fashion Design Workshop (.5-3)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times**Transfer acceptability:** CSU

Covers areas of the fashion design industry which are rapidly changing or require current short term specific training.

**FASH 295 Directed Study in Fashion (1,2,3)**

3, 6, or 9 hours laboratory

**Prerequisite:** Approval of project or research by department chairperson/director

**Note:** May be taken 4 times**Transfer acceptability:** CSU

Independent study for students who have demonstrated skills and/or proficiencies in Fashion subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

**Filipino**

See Tagalog

**Fire Technology (FIRE)**

Contact Public Safety Programs for further information.

(760) 744-1150, ext. 1722

Office: PSTC, 182 Santar Place, San Marcos

**Associate in Arts Degrees -**

AA Degree requirements are listed in Section 6 (green pages).

- Fire Technology - Emergency Management
- Fire Technology - General

**Certificates of Achievement -**

Certificate of Achievement requirements are listed in Section 6 (green pages).

- Fire Technology - Emergency Management
- Fire Technology - General

**PROGRAMS OF STUDY****Fire Technology - Emergency Management**

Prepares student for career in Emergency Management.

**A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT**

Program Requirements		Units
FIRE 100	Fire Protection Organization	3
FIRE 115	Hazardous Materials I	3
FIRE 120	Building Construction for Fire Protection	3
FIRE 131	Emergency Preparedness	3
FIRE 132	Fundamentals of Emergency Management	3
FIRE 133	Disaster Mitigation	3
<b>Electives (Select 12 units)</b>		
FIRE 51	Fire Academy Preparation	2
FIRE 71	Trench Rescue	.5
FIRE 72	Swiftwater Rescue	.5
FIRE 98	Fire Service Skills	5.5
FIRE 105	Fire Hydraulics	3
FIRE 118	Fire Prevention Technology	4
FIRE 125	Fire Apparatus and Equipment	3
FIRE 130	Fire Protection Equipment and Systems	3
FIRE 145	Fire Fighting Tactics and Strategy	3
FIRE 151	Fire Fighter I Academy	18
FIRE 152	Driver Operator Academy	4.5
FIRE 160	Wildland Fire Control I	3
FIRE 165	Fundamentals of Fire Protection Chemistry	3
FIRE 168	Volunteer Fire Fighter Academy	4
FIRE 175	Fire Command IA	2.5
FIRE 176	Fire Command IB	2.5
FIRE 180	Fire Prevention IA	2.5
FIRE 181	Fire Prevention IB	2.5
FIRE 185	Fire Management I	2.5
FIRE 190	Fire Investigation IA	2.5
FIRE 193	Fire Instructor IA	2.5
FIRE 194	Fire Instructor IB	2.5
FIRE 197A	Fire Technology General Topics	5.5
FIRE 197B	Fire Technology Command Topics	5.5
FIRE 197C	Fire Technology Field Topics	5.5
<b>TOTAL UNITS</b>		<b>30</b>

**Fire Technology - General**

Prepares students for a career in fire suppression, fire prevention and/or fire protection.

The following courses may be substituted: CHEM 100 will substitute for FIRE 115; PHYS 102 or 120 or PHSC 100 will substitute for FIRE 165.