This individualized course is designed to assess, by means of diagnostic testing and the California Community College learning disability eligibility process, the student's need for academic accommodations in the community college setting. The student will be counseled in planning appropriate educational goals and in selecting and preparing for college classes.

DR 15 English Essentials for Students with Disabilities (3) 3 hours lecture

Note: Pass/No Pass grading only; may be taken 4 times; Students must have the ability to learn in a group setting. Students must be able to produce computer generated work by using the keyboard or other assistive technology. Non-degree Applicable

Provides special assistance for students with disabilities to develop basic skills in written communication. Working with computers is part of the class format.

DR 18 Phonics for Students with Disabilities (3) 3 hours lecture

Note: May be taken 3 times

Non-degree Applicable

This course is designed to meet the needs of students with disabilities. It teaches the use of phonics as a spelling and reading strategy.

DR 20	Pre-Algebra Support	(3)
3 hours lecture		

Note: Pass/No Pass grading only; may be taken 4 times

Non-degree Applicable

Provides programmed instruction on an individual and/or small group basis to students with disabilities. Practice in understanding and performing basic arithmetic tasks necessary for successful functioning in society.

DR	25	Algebra Support	(1.5,3)
11/	an 2 hauna	lastura	

1¹/₂ or 3 hours lecture

Recommended preparation: MATH 15 or eligibility for MATH 50 **Note:** Pass/No Pass grading only; may be taken 4 times

Non-degree Applicable

Provides personalized instruction in basic study management techniques for the support of students with disabilities in mainstream classes. The course will help students with disabilities to develop specialized study techniques and interpersonal skills needed for success in mainstream classes.

DR 26 Composition Skills and Strategies for the Intermediate Writer

3 hours lecture

Recommended preparation: ENG 10 or eligibility for ENG 50

Note: May be taken 2 times

Non-degree Applicable

This class is designed to help students with disabilities improve their intermediate composition skills through methods and strategies specific to their disabilities.

DR 40 Adapted Computer Skills

3 hours lecture

Note: May be taken 3 times

Non-degree Applicable

Provides computer training using specialized software and hardware adaptations to assist students with disabilities to develop skills in word processing and Internet research.

DR 41	Advanced Adapted Computers for	
	Students with Disabilities	(3)
• · ·		

3 hours lecture

Recommended preparation: DR 40

Note: May be taken 3 times

Non-degree Applicable

Provides training in more advanced software for students with disabilities by using their prescribed access technology. Course work meets computer literacy competence for CSUSM.

DR 42 Voice Recognition for Students with Disabilities (3)

3 hours lecture

Note: May be taken 3 times

Non-degree Applicable

Provides voice recognition computer training for students with disabilities.

DR 43.1 Software for Students with Vision Loss I (3) 3 hours lecture

Recommended Preparation: Keyboarding skills with a minimum of 15 words per minute

Note: May be taken 2 times

Non-degree Applicable

Provides training using specialized software and hardware adaptations to assist students with blindness/low vision to develop computer skills.

DR 43.2 Software for Students with Vision Loss II (3) 3 hours lecture

Recommended Preparation: Keyboarding skills with a minimum of 15 words per minute along with prior experience with a screen reading or magnification application

Note: May be taken 2 times

Non-degree Applicable

Provides training using specialized software and hardware adaptations in combination with Microsoft Office, Internet Explorer, and other academic applications.

DR 45L Adapted Computer Laboratory (1) 3 hours laboratory

Note: Pass/No Pass grading only; may be taken 4 times

Non-degree Applicable

Provides supervised hands on opportunities to acquire and reinforce skills on computer equipment adapted for students with disabilities.

DR 47 Topics in Disability Resource (.5-3)

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

Note: May be taken 3 times

Non-degree Applicable

(3)

(3)

Topics in disability resource. See Class Schedule for specific topic offered. Course title will designate subject covered.

Drafting Technology (DT)

Contact the Design and Consumer Eudcation Department for further information. (760) 744-1150, ext. 2349 Office: ST-49

Associate in Arts Degrees -

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

- Architectural Drafting Technology
- Computer Assisted Drafting
- Drafting Technology Multimedia
- Drafting Technology Technical
- Electro-Mechanical Drafting and Design
- Interactive Media Design Emphasis in 3D Modeling and Animation
- Interactive Media Design Emphasis in Multimedia Design

Certificates of Achievement -

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

- Architectural Drafting Technology
- Computer Assisted Drafting
- Drafting Technology Multimedia
- Drafting Technology Technical
- Electro-Mechanical Drafting and Design
- Interactive Media Design Emphasis in 3D Modeling and Animation
- Interactive Media Design Emphasis in Multimedia Design

PROGRAMS OF STUDY

Architectural Drafting Technology

Prepares students for employment as a design/production drafter in the field of architecture.

Students concerned with transfer into an architectural program at a university should review specific course requirements with their architectural instructor and the Counseling Department.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requi	rements	Units
DT 105	Basic Architectural Drafting	3
DT 120 or	Architectural History	
DT 121	Multicultural Architectural History	3
DT 125	AutoCAD Introduction to Computer Aided Drafting	3
DT 135	Architectural Materials/Methods Construction	3
DT 144	Architectural Drawing and Color	3
DT 145	Architectural Delineation/Pictorial Drawing	4
DT 155	Architectural Theory	2
DT 160	Environmental Architecture and Design	3
DT 200	Advanced Computer Aided Architectural Drafting	4
DT 202	Introduction to Revit Architecture	
Electives (Selec	et 9 units)	
CE 100	Cooperative Education	1,2,3,4
CE 105	Job Hunting Techniques	1,2,3
CSIT 120/		
R CSIS 120	Computer Applications	3
DT 120 or	Architectural History	
DT 121	Multicultural Architectural History	3
DT 126	AutoCAD Intermediate Computer Aided Drafting	3
DT 127	AutoCAD Customization	2
DT 129	Basic Architectural Drafting with AutoCAD	3
DT 215	Architectural Design Fundamentals I	5
DT 216	Architectural Design Fundamentals II	5
MATH 115	Trigonometry	3
TOTAL UNITS		40

Computer Assisted Drafting

Prepares students in the skills necessary for employment as a computer assisted drafting operator.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requ	lirements	Units
CSIT 105	Computer Concepts and Applications	3
DT 125	AutoCAD Introduction to Computer Aided Drafting	3
DT 126	AutoCAD Intermediate Computer Aided Drafting	3
DT 127	AutoCAD Customization	2
DT 128	SolidWorks Intro to 3D Design and Presentation	3
IT/WELD 108	Technical Mathematics	3
Electives (Sele	ect 12 units)	
DT 110	Technical Drafting I with AutoCAD	4
DT I I I	Technical Drafting II with AutoCAD	4
DT 140	Electronic Drafting and Design	3
DT 145	Architectural Delineation/Pictorial Drawing	4
DT 196B	Special Problems/CAD	1,2,3
DT 200	Advanced Computer Aided Architectural Drafting	4
DT 210	Printed Circuit Board Design	3
BUS 205	Business Writing	3
CE 105	Job Hunting Techniques	1,2,3
MATH 110	College Algebra	4
MATH 115	Trigonometry	3
CE 100	Cooperative Education	1,2,3,4
TOTAL UNITS		

Drafting Technology - Multimedia

Prepares students in the skills necessary for employment in the multimedia presentation field.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

TOTAL UNITS	5	32
MUS 180	Computer Music I	3
MATH 115	Trigonometry	3,4
MATH 110 or	College Algebra	
MATH 60 or	Intermediate Algebra	
MATH 50 or	Beginning Algebra	
GCMW 201	Multimedia II	3
R GCMW 100	Multimedia I	3
GCMW/	0	•
R GCIP 140	Digital Imaging/Photoshop I	3
GCIP/		5
DT 196B	Special Problems in CAD	2
DT 131	SolidWorks Adv to 3D Design and Presentation	2
DT 130	CAD/CAM Machining	ר, ב, ג, ד ג
CF 100	Cooperative Education	1234
B CSIS 120	Computer Applications	3
CSIT 120/		5
COMM 100	Mass Media in America	ג, י ג
CE 105	In Hunting Techniques	123
ARTI 240	Digital 3D Design and Animation	3
ARTI 246	Digital 3D Design and Modeling	2
	Motion Design	2
	CT 12 UNITS)	2
IT/WELD 108	Technical Mathematics	3
DT 184	Real Time 3D Technical/Game Animation	2
DT 182	3D Studio Max – Advanced 3D Modeling/Animation	3
DT 180	3D Studio Max – Intro to 3D Modeling/Animation	3
DT 128	SolidWorks Intro to 3D Design and Presentation	3
DT 126	AutoCAD Intermediate Computer Aided Drafting	3
DT 125	AutoCAD Introduction to Computer Aided Drafting	3
Program Requi	rements	Units

Drafting Technology - Technical

Prepares students in the skills necessary for employment as a drafter in machine, mechanical, electrical, aeronautical, civil, and other related engineering fields.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requi	rements	Units
DT IO0	Basic Mechanical Drawing	3
DT 110	Technical Drafting I with AutoCAD	4
DT I I I	Technical Drafting II with AutoCAD	4
DT 125	AutoCAD Intro to Computer Aided Drafting	3
DT 126	AutoCAD Intermediate Computer Aided Drafting	3
DT 127	AutoCAD Customization	2
DT 128	SolidWorks Intro to 3D Design and Presentation	3
IT/WELD 108	Technical Mathematics	3
Electives (Selec	ct 6 units)	
CE 105	Job Hunting Techniques	1,2,3
CSIT 120/		
R CSIS 120	Computer Applications	3
DT 130	CAD/CAM Machining	3
DT 131	SolidWorks Adv 3D Design and Presentation	3
DT 180	3D Studio Max – Intro to 3D Modeling/Animation	3
DT 182	3D Studio Max – Advanced 3D Modeling/Animation	3
DT 184	Real Time 3D Technical/Game Animation	2
DT 196B	Special Problems in CAD	1,2,3
MATH 50 or	Beginning Algebra	
MATH 60 or	Intermediate Algebra	
MATH 110 or	College Algebra	
MATH 115	Trigonometry	3,4
CE 100	Cooperative Education	1,2,3,4
TOTAL UNITS		

Electro-Mechanical Drafting and Design

Drafts detailed working drawings of electro mechanical equipment and devices. Indicates dimensions, materials, and manufacturing procedures for electronic industry.

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

Program Requi	rements	Units
DT IIO	Technical Drafting I with AutoCAD	4
DT III	Technical Drafting II with AutoCAD	4
DT 125	AutoCAD Introduction to Computer Aided Drafting	3
DT 127	AutoCAD Customization	2
DT 128	SolidWorks Intro to 3D Design and Presentation	3
DT 210	Printed Circuit Board Design	3
DT 211	Advanced Printed Circuit Board Design	3
IT/WELD 108	Technical Mathematics	3
Electives (Selec	ct 6 units)	
BUS 205	Business Writing	3
CSIT 120/		
R CSIS 120	Computer Applications	3
DT 126	AutoCAD Intermediate Computer Aided Drafting	3
DT 130	CAD/CAM Machining	3
DT 131	SolidWorks Advanced 3D Design and Presentation	3
DT 196A	Special Problems in Drafting	1,2,3
DT 196B	Special Problems in CAD	1,2,3
MATH 110	College Algebra	4
CE 100	Cooperative Education	1,2,3,4
TOTAL UNIT	S	31

Interactive Media Design

Prepares students with specific skills necessary for employment in the field of multimedia design and production. Students may choose an emphasis in either 3D modeling and animation, which emphasizes production skills and authoring systems, or multimedia design, which emphasizes content development and visual design of multimedia productions. Both areas of emphasis collaborate on an actual multimedia production.

Emphasis in 3D Modeling and Animation

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

Program Requi	rements	Units
ARTI 100	Introduction to Illustration	3
ARTI 246	Digital 3D Design and Modeling	3
ARTI 247	Digital 3D Design and Animation	3
DT 180	3D Studio Max – Intro to 3D Modeling/Animation	3
DT 182	3D Studio Max – Adv 3D Modeling/Animation	3
GCIP/	5	
R GCIP 140	Digital Imaging/Photoshop I	3
GCMW 204	Motion Graphics for Multimedia	3
Electives (Selec	t two courses)	
ARTD 150	Digital Concepts/Techniques in Art	3
ARTD 220	Motion Design	3
DT 128	SolidWorks Intro 3D Design and Presentation	3
DT 184	Real Time 3D Technical/Game Animation	2
GCIP 240	Digital Imaging/Photoshop III	3
GCMW 100	History of Multimedia	3
GCMW 201	Multimedia II	3
ENTT/RTV 120	Digital Television Production	3
RTV 124	Staging and Lighting for Television	3
TOTAL UNITS	S	26 – 27

Emphasis in Multimedia Design

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

Program Requi	irements	Units
ARTD 100	Graphic Design I	3
ARTD 220	Motion Design	3
ARTI 247	Digital 3D Design and Animation	3
GCIP 240	Digital Imaging/Photoshop III	3
GCMW/		
R GCMW 101	Multimedia I	3
GCMW 201	Multimedia II	3
GCMW 204	Motion Graphics for Multimedia	3
Electives (Sele	ct two courses)	
ART 197G	Topics in Art – Computer Art	3
ARTD 150	Digital Concepts and Techniques in Art	3
ARTI 246	Digital 3D Design/Modeling	3
DT 180	3D Studio Max – Intro to 3D Modeling/Animation	3
DT 182	3D Studio Max – Adv 3D Modeling/Animation	3
GC 100	Graphic Communications	3
GCIP/		
R GCIP 140	Digital Imaging/Photoshop I	3
GCIP/		_
R GCIP 152	Desktop Publishing/Illustrator I	3
GCMW 197B	Topics in Multimedia	3
GCMW/		
R GCMW 102	Web Page Layout I	3
GCMW 203	Web Multimedia	3
MUS 180	Computer Music I	3
KIV 1/0	Introduction to Video Editing	3
TOTAL UNIT	S	27

TOTAL UNITS

Interactive Media Design A.A. Degree or Certificate of Achievement is also listed in Art and in Graphic Communications.

COURSE OFFERINGS

DT 100 Basic Mechanical Drawing (3) 2 hours lecture-3 hours laboratory

Transfer acceptability: CSU

Fundamentals of mechanical drawing including theory, lettering, sketching, geometric constructions, orthographic projection, sectioning, developments, dimensioning, and pictorial and working drawings.

DT 105	Basic Architectural Drafting	(3)
/ 1	- Holes and	

6 hours lecture/laboratory Transfer acceptability: CSU

An introduction to architectural drafting including symbols, lettering, construction principles, details, and codes as related to the development of working drawings for simple residential design.

DT 106	Intermediate Architectural Drafting	(3)
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6 hours lecture/laboratory

Prerequisite: A minimum grade of' 'C' in DT 105 Transfer acceptability: CSU

A continued study in residential design including study in details, materials, elevations, specifications, electrical, and plumbing.

DT 110	Technical Drafting I with AutoCAD	(4)
8 hours lectur	ellaboratory	
Prerequisite:	A minimum grade of 'C' in DT 125, or concurrent enrollm	ient in
DT 125	-	

Transfer acceptability: CSU

Fundamentals of drafting including lettering, sketching, instruments, geometric constructions, orthographic projections, dimensioning, tolerancing, sectional views and auxiliary views. Drafting will be performed on the computer using AutoCAD software.

(3)

DT 111 Technical Drafting II with AutoCAD

8 hours lecture/laboratory

Prerequisite: A minimum grade of' 'C' in DT 110 and DT 125 **Transfer acceptability:** CSU

The study of Advanced Drafting practices using AutoCAD software. Basic studies will lead into geometric dimensioning, tolerancing, pictorial drafting, descriptive geometry and revolutions. Working/shop drawings in topography, developments, cabinet/millwork, structural steel, and welding will be performed.

DT 116 Geometric Dimensioning and Tolerancing

6 hours lecture/laboratory

Prerequisite: A minimum grade of' 'C' in DT 100

Transfer acceptability: CSU

Note: May be taken 2 times

An introduction to geometric dimensioning and tolerancing as used in the electro/mechanical industry. The student will learn to identify and use appropriate geometric symbols and techniques of geometric dimension and produce industrial quality drawings.

DT 120 Architectural History

3 hours lecture

Transfer acceptability: CSU; UC – DT 120 and 121 combined: maximum credit, one course

An overview of architectural history beginning with prehistoric cultures and continuing through Egyptian and Mesopotamia, Aegean and Greek, Roman and Byzantine, Romanesque and Gothic, and the Renaissance and Baroque periods. The second half of the course focuses on the development of modern western architecture.

DT 121 Multicultural Architectural History (3) 3 hours lecture

Transfer acceptability: CSU; UC – DT 120 and 121 combined: maximum credit, one course

A comparative study of the architecture of cultures outside the Western mainstream including: Pre-Columbian America; India and Southeast Asia, China and Japan, Russia and Eastern Europe; and the Moslem Empires. Special emphasis on the cultural forces and conditions which shaped and evolved the architecture.

DT 125 AutoCAD Introduction to Computer Aided Drafting (3)

2 hours lecture-3 hours laboratory

Note: May be taken 2 times; maximum of 4 completions in any combination of DT 125, 126, 127

Transfer acceptability: CSU; UC – DT 125 and 126 combined: maximum credit, one course

An introduction to computer aided drafting using AutoCAD software and IBM compatible computers. Hands on experience with AutoCAD to include the following operations: preparing and editing drawings, storage and retrieval of drawings, and production of commercial quality drawings on a plotter. Introductory computer terminology and techniques in Windows.

DT 126 AutoCAD Intermediate Computer Aided Drafting(3)

2 hours lecture/3 hours laboratory **Prerequisite:** A minimum grade of' 'C' in DT 125

Note: May be taken 2 times; maximum of 4 completions in any combination of DT 125, 126, 127

Transfer acceptability: CSU; UC – DT 125 and 126 combined: maximum credit, one course

Advanced theory and hands on operation of a CAD system. Emphasis is placed on large scale drawings, three dimensional software techniques, orthographic projections, and complex computer aided manufacturing applications.

DT 127 AutoCAD Customization

4 hours lecture/laboratory

Prerequisite: A minimum grade of' 'C' in DT 125

Note: May be taken 2 times; maximum of 4 completions in any combination of DT 125, 126, 127

Transfer acceptability: CSU

Advanced theory and hands on operation of a CAD system. Emphasis is placed on increased productivity using customization and portfolio presentation for successful career opportunities.

DT 128	SolidWorks Introduction to	
	3D Design and Presentation	(3)

6 hours lecture/laboratory

(4)

(3)

(3)

Prerequisite: A minimum grade of' 'C' in DT 125

Recommended preparation: DT 110

Note: May be taken 2 times Transfer acceptability: CSU

Advanced theory and hands on operation of three-dimensional software techniques. Emphasis is placed on wireframe, surface, solid, and parametric three-dimensional modeling.

DT 129 Basic Architectural Drafting with Auto CAD (3) 6 hours lecture //aboratory

Transfer acceptability: CSU

Basic fundamentals of architectural drafting using AutoCAD software to include the following drawings: plot plans, floor plans, foundation plans, framing plans, sections, elevations, and basic construction details.

DT 130 CAD/CAM Machining

6 hours lecture/laboratory

Prerequisite: A minimum grade of' 'C' in DT 110 and DT 128

Note: May be taken 2 times

Hands-on operation of importing three-dimensional solid and parametric three-dimensional models into CAD/CAM operations.

DT 131 SolidWorks Advanced 3D Design and Presentation(3)

6 hours lecture/laboratory

Prerequisite: A minimum grade of 'C' in DT 128

Note: May be taken 2 times

Transfer acceptability: CSU

Advanced theory and hands-on operation of solid and parametric three-dimensional models. Emphasis is placed on creating molds, advanced sheet metal design and developing dynamic assemblies.

DT 135	Architectural Materials and	
	Methods of Construction	(3)
// / .		

6 hours lecture/laboratory Transfer acceptability: CSU

An introduction to the use and application of building construction materials and processes.

DT 140	Electronic Drafting and Design	(3)
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6 hours lecture/laboratory

Note: May be taken 2 times

Transfer acceptability: CSU

Electro mechanical drafting and design generally required for an entry level position in the electronic industry.

DT 144	Architectural Drawing and Color	(3)
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6 hours lecture/laboratory **Note:** May be taken 2 times

Transfer acceptability: CSU; UC - DT 144, 145, 160, 215, 216 and ART 102, 103 combined: maximum credit, 18 units

An introduction to basic architectural drawing and design that explores the theory and application of perspective, shades and shadows, and color to architectural sketching, drawing, and model building. Includes a basic architectural design problem exploring the concept of architectural complexity.

DT 145	Architectural Delineation and	
	Pictorial Drawing	(4)
8 hours lectu	re/laboratory	
Recommend	ed preparation: DT 125 and DT 144	

Note: May be taken 2 times

(2)

Transfer acceptability: CSU; UC - DT 144, 145, 160, 215, 216 and ART 102, 103 combined: maximum credit, 18 units

Principles and techniques of pictorial drawing in architecture including isometric, oblique, and perspective projection; shades and shadows; and presentation graphics. The three dimensional and shading capabilities of AutoCAD will be utilized in coordination with the use of Photoshop software as a color rendering tool. Abstract architectural design concepts will also be explored.

DT 155 **Architectural Theory** (3) 3 hours lecture

Transfer acceptability: CSU

A study and analysis of the concepts and philosophies that have influenced or been the basis of architectural form from the Classical period to the present. The analysis will include the use of drawing and model-building tools to gain an understanding of these principles applied to specific structures throughout history.

DT 160 **Environmental Architecture and Design** (3)

6 hours lecture/laboratory

Note: May not be taken for Pass/No Pass grading

Transfer acceptability: CSU; UC - DT 144, 145, 160, 215, 216 and ART 102, 103 combined: maximum credit, 18 units

An introduction to the theory and application of bio-climate adaptive architectural design in small scale buildings including effective energy use, solar geometry, environmental measurements, heat flow, heat transfer, and thermal masses. Emphasis is on design and construction principles for lighting, passive shading, heating, cooling and ventilating envelope load-dominated buildings.

DT 180 3D Studio Max - Introduction to 3D **Modeling and Animation**

6 hours lecture/laboratory

Note: May be taken 2 times

Transfer acceptability: CSU

An overview of 3D Studio Max. Hands-on operation of the software to produce basic three-dimensional models and basic technical animations.

DT 182	3D Studio Max – Advanced 3D Modeling	
	and Animation	(3)

6 hours lecture/laboratory

Prerequisite: A minimum grade of 'C' in DT 180

Note: May be taken 2 times

Transfer acceptability: CSU

Advanced 3D Studio Max applications to create special visual effects for high-end image production. Advanced keyframing, time-based editing, controllers, and video post will be employed to master state-of-the-art rendering and animation. The class is structured to help students start using 3D Studio Max in a production environment.

DT 184 Real Time 3D Technical/Game Animation (2)

4 hours lecture/laboratory

Transfer acceptability: CSU

Students will create interactive 3D applications using a direct X base real time engine for the game industry, computer based training and product visualization.

DT 185 Architectural 3D Studio MAX (3)

6 hours lecture/laboratory

Prerequisite: A minimum grade of 'C' in DT 125 Note: May be taken 2 times

Transfer acceptability: CSU

An overview of 3D Studio MAX and AutoCAD to create realistic architectural three-dimensional models for rendering and animation.

DT 196A Special Problems in Drafting (1,2,3)

2, 4, or 6 hours lecture/laboratory

Note: May be taken 4 times

Transfer acceptability: CSU

This course is designed to aid the student in the enrichment of the area of concentration in drafting and is of a research nature. Content to be determined by the need of the student under signed contract with the instructor.

DT 196B Special Problems in Computer Aided Drafting (1,2,3) 2, 4, or 6 hours lecture/laboratory

Note: May be taken 4 times for a maximum of 9 units

Transfer acceptability: CSU

This is an advanced course designed to aid the student in the enrichment of an area of concentration in AutoCAD and third party drafting software and is of a research nature. Content to be determined by the need of the student under signed contract with the instructor.

Drafting Technology Topics

DT 197 (.5-4)Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/labo-

ratory may be scheduled by the department. Refer to Class Schedule. Note: May be taken 4 times

Transfer acceptability: CSU

Topics in Drafting. See class schedule for specific topic covered. Course title will designate subject covered.

DT 200 Advanced Computer Aided Architectural Drafting (4)

8 hours lecture/laboratory Prerequisite: A minimum grade of 'C' in DT 125 and A minimum grade of 'C' in DT 105, or concurrent enrollment in DT 105

Note: May be taken 2 times

Transfer acceptability: CSU

(3)

Advanced techniques in the operation of AutoCAD software for architectural applications on IBM-compatible computers. Preparation of various architectural working drawings from a preliminary residential design.

DT 202	Introduction to Revit Architecture	(3)
6 hours lecture	e/laboratory	
Recommende	d preparation: DT 200	
Note: May be	taken 2 times	
Transfer acce	ptability: CSU	

Preparation of basic 3D architectural information models and (BIM). Manipulation for preparation of individual architectural working drawings, including: dimensioned floor plans, building sections, elevations, etc. using Revit software.

DT 210 **Printed Circuit Board Design** (3)

6 hours lecture/laboratory

Prerequisite: A minimum grade of 'C' in DT 110 Note: May be taken 2 times

Transfer acceptability: CSU

Instruction in printed circuit board design generally required for entry level positions in the electronic industry. Includes artwork and complete documentation for analog and digital multi-layer, flexible and high-speed boards using current IPC standards. Drafting will be performed on the computer using high-end printed circuit board software.

DT 211 **Advanced Printed Circuit Board Design** (3)

6 hours lecture/laboratory

Prerequisite: A minimum grade of 'C' in DT 210

Note: May be taken 2 times Transfer acceptability: CSU

Advanced problems and instruction in printed circuit board design generally required for entry-level position in the electronic industry. Special emphasis will be placed on advanced applications including surface mount technology. Includes artwork and complete documentation for analog and digital multi-layer, flexible and high-speed boards using current IPC standards. Drafting will be performed on the computer using AutoCAD and PADS software.

DT 215 Architectural Design Fundamentals I	(5)
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10 hours lecture/laboratory

Recommended preparation: DT 144 and 155 Transfer acceptability: CSU; UC - DT 144, 145, 160, 215, 216 and ART 102, 103 combined: maximum credit, 18 units

Development of problem solving and analytical skills in architectural design involving consideration of factors of architectural form in two- and three-dimensional compositions, and design concepts and applications.

DT 216 (5) Architectural Design Fundamentals II

10 hours lecture/laboratory Recommended preparation: DT 145 and 215

Transfer acceptability: CSU; UC - DT 144, 145, 160, 215, 216 and ART 102, 103 combined: maximum credit, 18 units

Complex architectural problems involving consideration of factors of structure, site, and climate.