

# **COMPUTER AIDED DRAFTING AND DESIGN DEGREE**

## **Award**

Associate in Applied Science Degree

## **Length**

Four-Semester (Two-Year) Program

## **Purpose**

The Computer Aided Drafting and Design curriculum is designed to prepare persons for full-time employment as qualified drafters to work with engineers, as well as industries and businesses. Graduates will be capable of skilled, neat, rapid lettering and line work, in addition to accurate detail in assembly drawings as expected of a drafter.

## **Occupational Objectives**

CAD Specialist  
Computer-Aided Drafter  
Designer  
Drafter  
Drafting Supervisor  
Electrical Drafter  
Electronic Drafter  
Fixture Design Drafter  
Machine Design Drafter  
3D Solid Modeling

## **Admission Requirements**

Entry into most curriculum courses in Computer Aided Drafting and Design require that students be eligible for MTH 115.

Students who plan to transfer to a four-year college after completing A.A.S. degree requirements should inform their academic advisors at the beginning of studies to determine the appropriate courses to meet transfer requirements.

## **Program Requirements**

Approximately one half of the curriculum will include courses in Computer Aided Drafting and Design technology with the remaining courses in related areas, general education, and electives. Instruction will include both the theoretical concepts and practical applications needed for future success. Students are advised to consult with their faculty advisor and a counselor to plan their program and select electives. Upon completion of the program, the graduate will receive an Associate of Applied Science degree in Computer Aided Drafting and Design.

## **Advanced Placement**

Students who have completed a two-year high school drafting program with a "C" average or better and students who have had occupational experience as a drafter may qualify for advanced placement in the program. Proficiency tests will be administered to aid in placement and to determine the amount of credit which can be awarded for previous occupational or educational experiences.

Although Computer Aided Drafting and Design prepares students for employment upon graduation, some colleges and universities will accept associate degree graduates in engineering technology programs.

Students who plan to transfer to a four-year college after completing the A.A.S. degree requirements in Computer Aided Drafting and Design should inform their academic advisors at the beginning of studies to determine the appropriate courses to meet transfer requirements.

FIRST SEMESTER (Fall)

DRF	114	Drafting I	3
DRF	120	Introduction to Graphic Representation	3
ITE	115	Introduction to Computer Applications & Concepts	3
MAC	131	Machine Lab I	2
MTH	115	Technical Mathematics I (or MTH 151 or MTH 163)	3
SDV	106	Preparation for Employment (or SDV 100)	1
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SECOND SEMESTER (Spring)

DRF	136	Descriptive Geometry for Drafting	3
DRF	201	Computer-Aided Drafting & Design I	4
DRF	226	Computer-Aided Machining	3
IND	113	Materials and Processes	2
MAC	132	Machine Lab II	2
—	—	Social Science Elective <sup>1</sup>	3
—	—	Health or PE	1
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THIRD SEMESTER (Fall)

DRF	155	Fundamentals of Architectural Drafting	3
DRF	202	Computer-Aided Drafting & Design II	3
DRF	241	Parametric Solid Modeling I	3
ENG	115	Technical Writing (or ENG 111)	3
MEC	131	Mechanics I - Statics for Engineering Technology	3
SPD	137	Oral Interpretation	3
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FOURTH SEMESTER (Spring)

DRF	203	Computer-Aided Drafting & Design III	3
DRF	238	Computer Aided Modeling & Rendering I	3
DRF	242	Parametric Solid Modeling II	3
DRF	243	Parametric Solid Modeling III	3
DRF	280	Design Capstone Project	2
—	—	Social Science Elective <sup>1</sup>	3
—	—	Health or PE	1
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Total Minimum Credits 69

FOOTNOTE:

<sup>1</sup> Students may choose from college approved Social Science electives on page 33 of the NRCC catalog.