

COMPUTER AIDED DESIGN (MDT)

ASSOCIATE IN APPLIED SCIENCE DEGREE

This curriculum prepares students for entry-level employment ranging from CAD operators to mechanical designers using AutoCAD software. Courses are taught in state-of-the-art facilities and feature the latest release of AutoCAD.

PROGRAM OUTCOMES:

- 1. Skills
• Create CAD-Drawings using various types of CAD-software.
• Apply critical thinking identify potential problems before they arise)
2. Comprehension
• Suggest solutions to improve processes.
• Classify drawings by type (assembly, mechanical, architecture etc.)
3. Application
• Apply CAD-software as a problem solving tool.
• Investigate/use search engine applications to find parts and specifications.
4. Analysis
• Analyze and determine the best approach to solve mechanical problems.
• Identify parts and components of mechanical assemblies.
5. Synthesis
• Design, assemble and modify mechanisms to formulate a proposal for a solution.
• Simulate movements of mechanical assemblies.
6. Evaluation
• Estimate time, cost and quality of projects.
• Measure existing processes (identify efficiencies and flaws)
7. Professionalism
• Collaborate in finding solutions to problems.
• Develop a proactive stance.
• Display a strong work ethic.

FIRST SEMESTER

CREDIT HOURS

Table with 3 columns: Course ID, Course Name, and Credit Hours. Rows include CAD 100, CAD 101, CAD 102, Mathematics\*, and General Education Requirements, totaling 15 credit hours.

SECOND SEMESTER

Table with 3 columns: Course ID, Course Name, and Credit Hours. Rows include CAD 103, CAD 104, CAD 141, CAD Elective, Mathematics\*, and General Education Requirements, totaling 18 credit hours.

## 2018-2019 CATALOG

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### THIRD SEMESTER

CAD	203	Electronics Drafting.....	3
CAD	205	Mechanical Design .....	3
CAD	220	Autodesk Inventor.....	3
		CAD Elective.....	3
		General Education Requirements .....	4
			Total 16

### FOURTH SEMESTER

CAD	215	3D Modeling.....	3
CAD	225	Industrial Applications.....	3
CAD	241	AutoCAD Productivity .....	3
CAD	253	Successful Career & Life Strategies.....	2
		General Education Requirements .....	5
			Total 16

Overall Total 65

#### NOTES:

\* MAT 102 or MAT 105 and MAT 110 are recommended.

Students are encouraged to consult with the instructor or advisor about the availability and scheduling of these courses.

#### CAD Electives (6 Credits)

##### OPTION 1

CAD	107	20/20 Kitchen Design .....	3
CAD	127	Solid Works Essentials .....	3
CAD	137	Revit MEP Fundamentals.....	3

##### OPTION 2

CAD	127	Solid Works Essentials .....	3
CAD	227	Solid Works Assemblies .....	3

##### OPTION 3

CAD	137	Revit MEP Fundamentals.....	3
CAD	237	Revit BIM Management .....	3