

Mechanical Engineering Technology

ENGINEERING TECHNOLOGIES DEPARTMENT

Associate in Applied Science (A.A.S.) Degree

Mechanical Engineering Technology provides the right combination of theory and hands-on training to prepare students for employment opportunities in the design, manufacture and set-up of mechanical equipment such as engines, power generation and control systems, and manufacturing systems (including robots). Specific job responsibilities include working as a designer, computer aided design/drafting, instrumentation and testing of machines and systems, and developing and troubleshooting manufacturing systems.

Can students who major in Mechanical Engineering Technology transfer to a four-year college or university?

Students may choose to participate in the Joint Admissions Program with the New Jersey Institute of Technology. Articulation agreements with public and private institutions offer students who earn the A.A.S. degree the opportunity to transfer all of their coursework to the four-year institution. Students in specialized programs, or who earn an A.A.S. degree should discuss the transfer process with an advisor.

Are there any requirements that must be satisfied before taking courses in the major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course. Students must also have a grade of "C" or better in high school algebra II and geometry.

How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

Questions?

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MECHANICAL ENGINEERING TECHNOLOGY

Associate in Applied Science (A.A.S.) Degree - MEC.AAS

Below are required courses and recommended course groupings and sequences for program completion.

Courses	Credits	Requisites/Comments
<i>Semester I</i>		
MCT 101 Introduction to Technology	2	MAT 013 or passing score on the College's placement test. Corequisite(s): MAT 014
MAT 129A Precalculus Part A	2	Appropriate score on the College's placement test and/or satisfactory score on the diagnostic examination, "C" or better in MAT 014 or MAT 014A and MAT 014B, or departmental approval. MAT 129 may be substituted for MAT 129A & MAT 129B.
ENG 121 English Composition I	3	A passing score on the College's placement test or a grade of "C" or better in ENG 010.
ELT 105 Foundations of Electronics Technology	4	MAT 013 or appropriate score on College's placement test. Corequisite(s): MAT 014 or higher level
MEC 123 Technical Graphics/CAD I	3	
PED ___ Physical Education Elective	1	Students have the option of substituting Health Education electives in the place of the Physical Education Elective.
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<i>Semester II</i>		
MAT 129B Precalculus Part B	2	MAT 129A or equivalent courses
ENG 122 English Composition II	3	A grade of "C" or better in ENG 121
CIT 105 Statics for Technicians	3	MCT 101, MAT 129A or MAT 129
MEC 125 Advance Mechanical Drawing/CAD II	3	MEC 123
MEC 130 Manufacturing Process & Materials	3	
___ ___ General Education Humanities Elective (GE HUM)	3	
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<i>Semester III</i>		
MAT 131A Analytic Geometry & Calculus I Part A	2	MAT 129 or MAT 129B or appropriate score on the College's placement test and/or satisfactory score on the diagnostic examination, or departmental approval. MAT 131 may be substituted for MAT 131A and MAT 131B.
PHY 123 General Physics I – Lecture (GE MST)	3	MAT 129 or MAT 129A/MAT 129B
PHY 125 General Physics I – Lab (GE MST)	1	MAT 129 or MAT 129A/MAT 129B
CIT 203 Strength of Materials	4	CIT 105
MEC 228 Kinematics Design	3	MEC 123 and MAT 129B or MAT 129
MEC 250 Solid Modeling	3	MEC 123
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<i>Semester IV</i>		
MAT 131B Analytic Geometry & Calculus I Part B	2	MAT 131A
PHY 124 General Physics II – Lecture (GE MST)	3	PHY 123
PHY 126 General Physics II – Lab (GE MST)	1	PHY 125
MEC 204 Fluid Mechanics	4	CIT 105, MAT 129B or MAT 129
MEC 260 Mechanical Design Project	2	Prerequisite(s): CIT 203, MEC 228 Corequisite(s): MEC 204, MCT 220
MCT 220 Robotics and Control Systems	3	ELT 105, MEC 123, MAT 129B or MAT 129
___ ___ General Education Social Science Elective (GE SS) 3		

Total Credits: 66

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