AREA: General Engineering Technology: Mechanical Engineering Technology

DEGREE: Associate of Applied Science Degree

LENGTH: Four semesters (two-year) program

PURPOSE: This curriculum provides educational opportunities for those who seek employment in industry, for those who desire to upgrade their knowledge or acquire practical skills in the field, and for those who wish to transfer and complete a bachelor of science degree in mechanical engineering technology.

OCCUPATIONAL OBJECTIVES: draftsman/designer, engineer's aide, engineering technician, industrial test technician, maintenance technician or other related positions

TRANSFER GUIDELINES: Graduates with appropriate course selection may qualify to enter mechanical engineering technology programs at selected universities. Students preparing for transfer must consult with the program advisor. Course selection is very important to assure junior status upon transfer. Potential transfer institutions include East Tennessee State University, North Carolina State University, Old Dominion University, Rochester Institute of Technology, West Virginia Institute of Technology and West Virginia University. Students interested in transferring to other institutions, including Virginia Tech, must determine transfer requirements of their intended destination school.

PROGRAM REQUIREMENTS: The curriculum is designed to integrate courses in mechanical engineering technology, mechanics, physics, general education, drafting, computer information systems and technical electives. Students entering the program must have algebra I and geometry skills or be willing to improve those skills through developmental studies. The program may be completed on a part-time basis since courses are alternated between day and evening hours. Technical electives must be selected from an approved list available from the program advisor. Upon satisfactory completion of the four-semester program, the graduate will be awarded the associate of applied science degree in general engineering technology with a mechanical engineering technology specialization. Transfer opportunities for associate of applied science degrees, if existing, are very specific in nature. Students enrolling in an applied science degree with plans to transfer should explore opportunities with their faculty advisor.

Course#		Title	Credits
First Semester			
EGR	110	Engineering Graphics	3
ENG	111	College Composition I	3
MEC	113	Materials and Processes of Industry	3
MTH		Approved math elective[1]	3
PED/HLT		Physical education (or health)	2
SDV	100	College Success Skills	1
		Approved social science elective[2]	3
		Total	**18**
Second Semester			
DRF	241	Parametric Solid Modeling I	3
ENG	115	Technical Writing	3
ETR	113	D.C. and A.C. Fundamentals I	3
MTH		Approved math elective[1]	3
		Approved programming/computer elective[3]	3
		Approved social science elective[2]	3
		Total	**18**
Third Semester			
DRF	242	Parametric Solid Modeling II	3
EGR	135	Statics for Engineering Technology	3
EGR	206	Engineering Economics	3
PHY	201	General College Physics I	4
		Approved technical elective[3]	3
		Total	**16**
Fourth Semester			
EGR	136	Strength of Materials	3
EGR	216	Computer Methods in Engineering and Technology	3
EGR	247	Materials Lab	1
PHY	202	General College Physics II	4
		Approved technical elective[3]	3
		Approved humanities elective[4]	3
		Total	**17**
		Program Total	**69**

[1] Approved math electives: MTH 115 and MTH 116, or MTH 163 and MTH 164, or MTH 213 and MTH 214 will fulfill the math requirements for the program. Developmental math courses may be required for students to build their math skills before taking any of the approved math electives. Students must take a math placement test to determine their math skill level.

[2] Students may select social science electives from the approved list.

[3] Requires approval of program advisor.

[4] Students may select humanities electives from the approved list.