

## *Associate of Applied Science Degree in General Engineering Technology: Civil Engineering Technology Specialization*

**AREA:** General Engineering Technology:  
Civil Engineering Technology Specialization

**DEGREE:** Associate of Applied Science Degree

**LENGTH:** Four semesters (two-year) program

**PURPOSE:** This curriculum provides educational opportunities for those who seek employment in the construction 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 civil engineering technology.

**OCCUPATIONAL OBJECTIVES:** construction/building inspector, construction estimator, draftsman/designer, engineer's aide, engineering technician or other related positions

**TRANSFER GUIDELINES:** Graduates with appropriate course selection may qualify to enter civil engineering technology programs at selected universities. Students preparing for transfer must consult with their program advisors. 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 civil engineering technology, mechanics, physics, general education, drafting, computers 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 curriculum, the graduate will be awarded the associate of applied science degree in general engineering technology with a civil 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 an advisor.

Course#	Title	Credits
<b>First Semester</b>		
ARC 130	Materials and Methods of Construction	3
EGR 110	Engineering Graphics	3
ENG 111	College Composition I	3
MTH 115	Technical Math I or Approved Approved Higher Level Math <sup>1</sup>	3
SDV 100	College Success Skills	1
	Social Science Elective <sup>2</sup>	3
	<b>Total</b>	<b>16</b>
<b>Second Semester</b>		
ARC 221	Architectural CAD Appl. Software I	3
ARC 240	Designing Sustainable Built Environments	3
EGR 216	Computer Methods in Engineering and Technology	3
ENG 112/115	College Composition II or Technical Writing	3
MTH 158	College Algebra or Approved Higher Level Math <sup>1</sup>	3
	Social Science Elective <sup>2</sup>	3
	<b>Total</b>	<b>18</b>
<b>Third Semester</b>		
CIV 171	Surveying I	3
EGR 135	Statics for Engineering Technology	3
EGR 206	Engineering Economics	3
PED/HLT	Physical Education or Health	1
PHY 201	General College Physics I	4
	Technical Elective <sup>3</sup>	3
	<b>Total</b>	<b>17</b>
<b>Fourth Semester</b>		
CIV 172	Surveying II	3
EGR 136	Strength of Materials	3
PHY 202	General College Physics II	4
	Technical Elective <sup>3</sup>	3
	Humanities Elective <sup>4</sup>	3
	<b>Total</b>	<b>16</b>
	<b>Program Total</b>	<b>67</b>

<sup>1</sup> Approved higher level math courses include: MTH 163/164, MTH 271/272, MTH 173/174. Students should check with program faculty.

<sup>2</sup> Students may select social science electives from approved list on page 41.

<sup>3</sup> An approved list of technical electives is available on page 43.

<sup>4</sup> Students may select humanities electives from approved list on page 41.