Civil/Construction Technology Associate of Applied Science

Civil technicians usually work with architects, civil engineers, surveyors, or project engineers as a part of either a design team or field crew. Others are specialists who concentrate on a single activity such as soil testing or wastewater treatment. Construction technicians also work with architects and engineers doing design and drafting work, preparing cost estimates, working as on-site project managers, conducting materials testing and either working for or becoming independent contractors. Job opportunities include, but are not limited to:

- Soil conservation technician — field surveys, lab testing
- State Highway Department — soil and material testing, maintenance
- Manufacturing — factory built modular housing construction
- Lumber yards — estimating materials, sales
- Municipal — water and wastewater plant operators, road and bridge construction and maintenance crews
- Surveyor’s Assistant — mine and land boundary
- Architectural Design/Drafting/Estimating
- Structural Design/Drafting/Estimating
- Project Manager
- Supervisor — lumber yards, construction sites
- Environmental Supervisor — utility companies
- Wastewater Plant Supervisor/Operator
- Independent Test Laboratory — materials, products
- Highway Design and Planning

MAJOR AND ELECTIVES:

- AGR143 Introduction To Soils ......................... 3
- BIO143 Environmental Science .......................... 3
- TEC102 Introduction to Technology .................... 1
- TEC120 Architectural Design & Drafting ............. 3
- TEC126 Topographic & Map Drafting .................. 3
- TEC130 Computer Aided Design / Drafting .......... 3
- TEC132 Advanced Computer Aided Design .......... 3
- TEC133 CAD/D-Special Problems                  3
- TEC152 Construction Methods & Estimating .......... 3
- TEC154 Surveying I .................. 3
- TEC155 Surveying II .................................. 3
- TEC173 Problem Analysis ................................ 1
- TEC178 Blueprint Reading ................................. 3
- EEE150 Basic Electronics ................................ 3
- EEE155 Electrical Systems ................................. 3
- PAW106 Preparation for Employment ............... 1

GENERAL EDUCATION:

- Communications Electives ......................... 6
- Human Development Elective ......................... 3
- History/Political Science Elective .................. 3
- Mathematics Electives ................................. 6-10
- Physical Science Elective ............................. 6-10
- Total Credit Hours .................................. 66-74

General Education Courses:

Associate of applied science degrees require a general education component which generally consist of college-level (non-remedial) coursework or its equivalent, including all relevant prerequisites, in each of the following curricular areas:
COMMUNICATIONS .................................. 6 HOURS
Choose two courses, from English and Communications.
Choose one written and one oral communication course.
Choose from the following communications courses:
ENG132 Applied Communications* (written)
ENG133 English Composition I*+ (written)
ENG144 Public Speaking+ (oral)
ENG167 Interpersonal Communication (oral)
TEC104 Technical Writing* (written)

HUMAN DEVELOPMENT ....................... 3 HOURS
Choose from the following human development courses:
SOC113 General Sociology
SOC140 Human Relations*
PSY113 General Psychology I+
PSY116 Applied Psychology

HISTORY and POLITICAL SCIENCE .......... 3 HOURS
Choose from the following history and political science courses:
HIS123 American History I
HIS124 American History II
POS113 American National Government
POS114 American State & Local Government
POS133 International Relations

MATHEMATICS ................................. 6-10 HOURS
Choose two from the following mathematics courses:
MAT113 Intermediate Algebra*
MAT114 Applied Mathematics*
MAT123 College Algebra*+
MAT133 Trigonometry*+
MAT160 Calculus for Business/Soc. Sciences*+
MAT165 Analytic Geometry and Calculus I*
MAT215 Analytic Geometry and Calculus II*
TEC190 Technical Math I*
TEC191 Technical Math II*

PHYSICAL SCIENCE .............................. 6-10 HOURS
Choose from the following science courses:
PHS105 Applied Science
PHS110 Introduction to Physics
PHS125 Introductory Chemistry*
PHS142 College Physics*
PHS135 General Chemistry I*
PHS223 General Physics I*+
PHS248 Earth Science I
TEC107 Unified Technical Concepts I*+
TEC108 Unified Technical Concepts II*+

*Designates courses with prerequisites.
+Designates recommended courses for students planning to transfer to another institution or another program in the future.