

TOPS University Associate of Applied Science: Engineering Technology

Postsecondary Partner: [Southern University Shreveport](#)

Overview

The Associate in Applied of Science, Emphasis in Engineering Technology provides the curriculum for students who wish to specialize in Industrial Engineering and/or are preparing for application to other postsecondary programs in various Industrial and Manufacturing fields. Students who complete all requirements may also earn two additional Embedded Certificate in Quality Assurance Technology (CTS) and Certificate in Engineering Technology (CTS) with a 61 credit hour requirement.

Capstone Credentials

Regional (emerging)	Basic	Advanced	Fast Forward Advanced Plus
Not applicable	Certificate of Technical Studies: Quality Assurance Technician		Associate of Applied Science: Engineering Technology

**Core Academic Course*

***Jump Start CTE Course*

Grade 9	
Semester 1	Semester 2
LDOE Course/Code	LDOE Course/Code
*English I 120331	*Physical Science 150802 or Environmental Science 150310
*Algebra I 160321	**Quest for Success 080411 (elective)
*Civics 220501/220504	*Foreign Language I
*Physical Education I 190105	*World History 220401

Grade 10	
Semester 1	Semester 2
LDOE Course/Code	LDOE Course/Code
*English II 120332	*Biology 150301
*Geometry 160323	*Algebra II 160322
*Foreign Language II	*U.S. History 220403
*½ Physical Education II 190106 ½ Health Education 190500	*Chemistry 150401

Additional and/or equivalent TOPS core aligned courses can be found in Bulletin 741.

Grade 11			
Semester 1		Semester 2	
Postsecondary Course	LDOE Course/Code	Postsecondary Course	LDOE Course/Code
*Freshman English 1 SENG 101S	*English III: DE - CENL 1013 English Composition I 120601	**Engineering Graphics ENGR 120S	**DE Drafting & Design Technology I 311300
*Western Civilization SHIS 101S	*Western Civ: DE - CHIS 1013 Western Civilization I 220446	**Intro to Industrial Engineering Technology IETC 125S	**DE Intro to Industrial Engineering Technology 891406
Introduction to Sociology SOC 201S	DE Sociology 220601	*Plane Trigonometry SMAT 122S	*Adv Math - Pre-Calculus: DE - CMAT 1223 Trigonometry 160501
*Chemistry I Lecture SCHE 132S/Lab SCHE 132LS	*Chemistry II: DE - CCEM 1103 Chemistry I 150419	**Introduction to Engineering & Technology ENGR 140S	**DE Introduction to Engineering & Technology 891407
*Pre-Calculus Algebra	*Pre-Calculus: DE- CMAT	**Technical	**DE Technical



SMAT 121S	1233 or (CMAT 1213 & 1223) Alg & Trig 160502	Communication ENGR 230S	Communication 890110
**Digital Logic Design ELEC 220S	**DE Digital Logic Design 891400	**Electrical Circuits I ELEC 110S	**DE Electrical Circuits I 891401

Grade 12			
Semester 1		Semester 2	
Postsecondary Course	LDOE Course/Code	Postsecondary Course	LDOE Course/Code
*Freshman English 2 SENG 102S	*English IV: DE - CENL 1023 English Composition II 120607	**Safety, Health, & Environment (OSHA) ENGR 201S	**DE Safety, Health, & Environment (OSHA) 891411
**Engineering Mechanics ENGR 226S	**DE Engineering Mechanics 891404	**Quality Control Systems (Lean Six Sigma) ENGR 208S	**DE Quality Control Systems (Lean Six Sigma) 891410
**Electrical Circuits II Lecture and Lab ELECT 210S	**DE Electrical Circuits II Lecture and Lab 891402	**Production, Planning & Control IETC 135S	**DE Production, Planning & Control 891409
**Manufacturing Materials & Science IETC 228S	**DE Manufacturing Materials & Science 891408	**Work Ergonomics & Measurement IETC 236S	**DE Work Ergonomics & Measurement 891412
**Electro-Mechanical Control Technology ENGR 240S	**DE Electro-Mechanical Control Technology 891403	**Industrial Engineering Technology Co-Op IETC 299S	**DE Industrial Engineering Technology Co-Op 891405
*Understanding the Arts FIAR 200S	*Fine Arts Survey: DE - CART 1013 Exploring the Arts 030593		

This pathway framework is an outline of how the approved courses can be implemented. Schools may opt to rearrange the order of course sequencing in order to meet local scheduling requirements. Additionally, Fast Forward pathways are dynamic and the Jump Start Review panel will consider course equivalents on an as needed basis.