



# AAS in Electrical/Electronic Controls Technology to

Bachelor of Applied Arts and Sciences in  
Manufacturing and Industrial Management  
General Without Certification Concentration <sup>T</sup>



## Guided Pathway 2019-2020 Catalog

### First Year – Tyler Junior College

FIRST SEMESTER	SECOND SEMESTER
TECM 1303 – Technical Calculations	ELPT 1325 – National Electrical Code I
IEIR 1302 – Introduction to Direct Current Circuits	IEIR 1304 – Alt. Current Circuits for Industrial Applications
CETT 1321 – Electronic Fabrication	CETT 1325 – Digital Fundamentals
<sup>C</sup> ECON 2301 – Principles of Macroeconomics * (080)	<sup>C</sup> ENGL 2311 – Technical & Business Writing (090)
<sup>C</sup> ENGL 1301 – Composition I (010)	Total semester hours: 12
Total semester hours: 15	

SUMMER I
IEIR 2388 – Internship – Industrial Electronics Technology/Technician *
Total semester hours: 3

### Second Year – Tyler Junior College

It's best to apply to Tarleton State University a full semester before you plan to transfer.

FIRST SEMESTER	SECOND SEMESTER
ELPT 2305 – Motors and Transformers	ELPT 1345 – Commercial Wiring
INCR 1302 – Physics of Instrumentation	ELPT 2347 – Electrical Testing and Maintenance
INTC 1341 – Principles of Automatic Control	ENER 2325 – SCADA and Networking
ELPT 2319 – Programmable Logic Controllers I	<sup>C</sup> SPCH 1321 – Business & Prof. Communication (010) *
<sup>C</sup> MATH 1314 – College Algebra (020) *	<sup>C</sup> PHIL 2306 – Introduction to Ethics (040)
Total semester hours: 15	Total semester hours: 15

### AAS: Electrical/Electronic Controls Technology

You will need to apply for the associate's degree at your community college. Contact your advisor there for more information.

#### These courses may be taken at Tyler Junior College or TSU

MATH 1316 – Plane Trigonometry or MATH 1342 – Elementary Statistical Methods	<sup>C</sup> ENGL 1302 – Composition II
<sup>C*</sup> Life and Physical Science Core Elective	<sup>C*</sup> Life and Physical Science Core Elective
<sup>C</sup> HIST 1301 – United States History I	<sup>C</sup> HIST1302 – United States History II
<sup>C*</sup> Creative Arts Core Elective	<sup>C</sup> GOVT 2305 – Federal Government
<sup>C</sup> GOVT 2306 – Texas Government	
Total Semester Hours: 16	Total Semester Hours: 13

### Third Year – Tarleton State University

FIRST SEMESTER	SECOND SEMESTER
ENGT 3318 Research & Reporting for Technologists	ENGT 3395 Project Management
Advanced ENGT Elective	Advanced ENGT Elective
Advanced ENGT Elective	Advanced ENGT Elective
Advanced ENGT Elective	Advanced ENGT Elective
Total Semester Hours: 12	Total Semester Hours: 12

### Fourth Year – Tarleton State University

FIRST SEMESTER
ENGT 3375 Continuous Improvement
Advanced Elective
Advanced Elective
Advanced Elective
Advanced Elective

Total Semester Hours: 15

Total: 128

**This is not an official degree plan. Check with an advisor; degree plans may change in later catalogs.**

Part-time students may also follow this sequence. Developmental coursework may be required.

\* You may take a different course to meet this requirement. A specific list is available from your advisor.

<sup>C</sup> This course counts for the Core Curriculum at any public college or university in Texas.

() Course numbers shown in parentheses are equivalent to these courses at Tarleton State University.

<sup>T</sup> Degree availability varies by campus; consult [www.tarleton.edu](http://www.tarleton.edu) for more information.

For questions about the university portion of this pathway,  
contact the Engineering Technology Department at (254)968-9010 or [Engineering.Technology@tarleton.edu](mailto:Engineering.Technology@tarleton.edu).