



Associate in Science in Engineering (TCC) to Bachelor of Science in Electrical Engineering (OSU)

Available in Stillwater

Tulsa Community College (years 1 and 2) – 2024-25

Year One – Tulsa Community College

Fall

TCC Equivalent or Substitute	OSU Requirement	✓
ENGR 1111 – Intro to Engineering	UNIV 1111	
*CHEM 1365 – General Chemistry for Engineers	CHEM 1414 + 1 hour elective	
ENGL 1113 – Composition I	ENGL 1113	
*MATH 2114 – Calculus I	MATH 2144 (A)	
^CSYS 1203 – Introduction to Computer Programming	^CS 1103 (A)	
Semester Credit Hours at TCC: 16		

Spring

TCC Equivalent or Substitute	OSU Requirement	✓
ENGL 1213 – Composition II	ENGL 1213	
HIST 1483 – Am Hist 1492 – Civil War or HIST 1493 – Am Hist Civil War - Pres	HIST 1483 (H) or HIST 1493 (DH)	
CSCI 2473 – C Language	CS 1113 (A)	
PHYS 2034 –Physics I with Calculus	PHYS 2014	
MATH 2124 – Calculus II	MATH 2153 (A) + 1 hour elective	
Semester Credit Hours at TCC: 17		

*Students must have completed MATH 1513 and MATH 1613 or MATH 1715 or have demonstrated math competencies at the pre-calculus level through test scores prior to the first semester to complete this degree within two years/within the number of hours listed in the agreement. See an academic advisor to learn more about Math placement testing.

^CSYS 1203 is only needed as a pre-requisite for CSCI 2473. Work with your advisor if you feel you can test out or to request instructor approval.

Year Two- Tulsa Community College

Fall

TCC Equivalent or Substitute	OSU Requirement	✓
ENGR 2103 Statics	ENSC 2113	
PHYS 2124 –Physics II with Calculus	PHYS 2114	
CSCI 2843 – C++ Programming Lang	CS 2433	
Humanities (3 credit hours)	Humanities	
MATH 2613 – Differential Equations	MATH 2233	
Semester Credit Hours at TCC: 16		

Spring

TCC Equivalent or Substitute	OSU Requirement	✓
3 hours from ENGR 2213 Thermodynamics ENGR 2523 – Elementary Dynamics ENGR 2143 – Strength of Materials	ENSC 2213 ENSC 2123 ENSC 2143	
POLS 1113 – American Federal Government	POLS 1113	
Humanities (3 credit hours)	Humanities	
MATH 2134 – Calculus III	MATH 2163 + 1 hour elective	
SOCI 1113 or PSYC 1113 General Education Required Elective	SOC 1113 (S) or PSYC 1113 (S)	
Semester Credit Hours at TCC: 16		

Before transferring to OSU, have the TCC Registrar send an official transcript to the OSU Admissions Office with any degrees earned noted on the transcript. If you have not completed the requirements for an associate degree, talk with your OSU Academic Advisor about Reverse Transfer options to use OSU coursework to complete your TCC associate degree.

Oklahoma State University (years 3 and 4) – 2024-25

Year Three – Oklahoma State University

Fall

OSU Requirement	✓
ECEN 2714 – Electric Circuits	
ECEN 2233 – Digital Logic Design	
MATH 3013 – Linear Algebra (A)	
ENGL 3323 – Technical Writing	
ENSC 2611 – Electrical Fabrication Lab	
Semester Credit Hours at OSU: 14	

Spring

OSU Requirement	✓
ECEN 3714 – Network Analysis	
ECEN 3213 – Computer Based Systems in Engineering	
ECEN 3903 – Semiconductor Devices	
IEM 3503 – Engineering Economic Analysis	
Semester Credit Hours at OSU: 13	

Year Four – Oklahoma State University

Fall

OSU Requirement	✓
ECEN 3314 – Electronic Devices and Applications	
ECEN 3513 – Signal Analysis	
ECEN 3613 – Applied Fields and Waives I	
ECEN 3913 – Solid State Electronic Devices or ECEN 3723 – Systems I	
ECEN elective (3 hours)	
Semester Credit Hours at OSU: 16	

Spring

OSU Requirement	✓
ECEN 4013 – Design of Engineering Systems	
ECEN 4503 – Probability & Statistics to Random Signals	
ECEN elective (3 hours)	
ECEN elective (3 hours)	
Semester Credit Hours at OSU: 12	

Year Five – Oklahoma State University

Fall

OSU Requirement	✓
ECEN 4024 – Capstone Design	
ECEN elective (3 hours)	
ECEN elective (3 hours)	
ECEN elective (3 hours)	
Semester Credit Hours at OSU: 13	

This plan is only one example of how a student may successfully complete degree requirements. Students are responsible for completing the requirements as given in the official degree requirements sheet.

