

Associate in Science in Engineering, Mechanical Engineering (TCC) to Bachelor of Science in Mechanical Engineering (University of Tulsa)

Total Transfer Credit Hours at TCC (69) + Total Credit Hours at University of Tulsa (64) = 133 credit hours Catalog Year: 2020-2021

Modalities Available (On-Campus, Online, Blended): On-Campus

University Campus Location: University of Tulsa, 800 S Tucker Dr, Tulsa, OK 74104

Note to Students: The following is an 8-semester map provided to guide students as they plan their undergraduate education. This university transfer map is based on a full-time academic load of 30 credit hours per year, but can be adjusted to fit a part-time schedule. Please note this is not an official degree plan, but a guide. Work with your academic advisor to develop a personalized degree plan based on this university transfer map.

YEAR ONE – TULSA COMMUNITY COLLEGE							
Semester One		Semester Two					
TCC Course and TU Equivalent Course	Hrs.	TCC Course and TU Equivalent Course	Hrs.				
ENGL 1113 Composition I TU Equivalent: FREL 1003	3	ENGL 1213 Composition II TU Equivalent: ENGL 1033	3				
*MATH 2114 Analytic Geometry & Calc. I TU Equivalent: MATH 2014	4	MATH 2124 Analytic Geometry & Calc. II TU Equivalent: MATH 2024	4				
ENGR 1111 Introduction to Engineering TU Equivalent: ME 1311	1	ENGR 1132 Engineering Design with Computer Aided Design <i>TU Equivalent: ME 1212</i>	2				
*CHEM 1315 General Chemistry I TU Equivalent: : CHEM 1013/1011 (4 credits) FREL 1001 (1 credit)	5	ENGR 1242 Introductory Engineering Computer Programming <i>TU Equivalent: FREL 1002</i>	2				
3 hrs. Humanities (<u>from TU Block I List</u>) TU Equivalent: Block I	3	PHYS 2034 Physics I with Calculus TU Equivalent: PHYS 2053/2051	4				
		HIST 1483 U.S. Hist. 1492 to the Civil War Era <u>or</u> 1493 U.S. Hist. Civil War Era to the Present <i>TU Equivalent: HIST 2503 (Block II)</i>	3				
Semester Credit Hours at TCC:	16	Semester Credit Hours at TCC:	18				

*<u>MATH PLACEMENT/ PRE-REQUISITES</u>: 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 the A.S. degree within two years. See an academic advisor to learn more about Math placement testing.

YEAR TWO – TULSA COMMUNITY COLLEGE							
Semester Three		Semester Four					
TCC Course and TU Equivalent Course	Hrs.	TCC Course and TU Equivalent Course	Hrs.				
PHYS 2124 Physics II with Calculus TU Equivalent: PHYS 2063/2061	4	3 Hrs. Humanities (<u>from TU Block II List</u>) TU Equivalent: Block II	3				
ENGR 2103 Engineering Statics TU Equivalent: ES 2013	3	General Education Req. Elec (<u>from TU Block II List</u>) <i>TU Equivalent: Block II</i>	3				
ENGR 2213 Thermodynamics TU Equivalent: ENGR 3053	3	ENGR 2523 Elementary Dynamics TU Equivalent: ME 2023	3				
MATH 2134 Analytic Geometry & Calculus III TU Equivalent: MATH 2073 (3 credits) FREL 1001 (1 credit)	4	ENGR 2143 Eng. Strength of Materials TU Equivalent: ES 3023	3				
MATH 2613 Elem. Differential Equations TU Equivalent: MATH 3073	3	ENGR 2613 Intro. to Electrical Science TU Equivalent: ECE 2003	3				
		POLS 1113 American Federal Government TU Equivalent: POL 2053 (Block II)	3				
Semester Credit Hours at TCC:	17	Semester Credit Hours at TCC:	18				



YEAR THREE – UNIVERSITY OF TULSA						
Semester Five		Semester Six				
TU Course	Hrs.	TU Course	Hrs.			
FYE 1001 First Year Experience	1	ME 3043 Energy Conversion	3			
ES 2513 Engineering Applications Programming	3	ME 3063 Manufacturing Processes	3			
ES 3003 Introductory Fluid Mechanics	3	ME 4024 Machine Dynamics	4			
ME 3034 Properties of Materials	4	Math or Science Elective Choose from: MATH 3013, MATH 3033, MATH 4123, MATH 4143, STAT 4318, BIOL 1603, CHEM 1023, PHYS 2063, GEOL 1014	3			
ME 3053 Instrumentation and Measurements	3	ECE 2001 Basic Electrical Measurements Laboratory	1			
ME 2001 Professional Aspects of Mechanical Engineering	1	**Block I Select a course on the list that also meets the HCGD requirement if haven't already been met previously with an appropriate Block II course	3			
Semester Credit Hours at TU:	15	Semester Credit Hours at TU:	17			

**Select a Block I course from the list that also meets the HCGD requirement if haven't already been met previously with an appropriate Block II course.

YEAR FOUR – UNIVERSITY OF TULSA					
Semester Seven		Semester Eight			
TU Course	Hrs.	TU Course	Hrs.		
ENGL 3003 Writing for the Professions	3	ME 4293 Interdisciplinary Design Projects	3		
ME 4383 Mechanical Engineering Design	3	ME 4054 System Dynamics and Controls	4		
ME 3014 Thermofluids	4	Computational Elective Choose from: ME 4033, ME 4093, MATH 4503	3		
ES 3073 Heat Transfer	3	Math or Science Elective Choose from: MATH 3013, MATH 3033, MATH 4123, MATH 4143, STAT 4318, BIOL 1603, CHEM 1023, PHYS 2063, GEOL 1014	3		
ME Elective	3	ES 3083 Engineering Economics	3		
Semester Credit Hours at TU:	16	Semester Credit Hours at TU:	16		

Additional Program Information:

• After matriculating into TU, a student must complete the mechanical engineering major with a grade point average of 2.0 or higher as well as an overall grade point average of 2.0 or higher in order to graduate.

Milestones and Recommended Actions:

- **Consider Summer Courses:** Summer courses at TCC can help accelerate your time to transfer, and help you stay on track. Talk to your advisor about planning summer courses.
- **During or After Year One at TCC:** Consider a campus tour of University of Tulsa and connect with a TU academic advisor, to ensure you are on track to transfer. Your TCC academic advisor can assist in planning these actions.
- **During Year Two at TCC:** After (or during) semester three coursework, apply for admission at University of Tulsa as a transfer student (<u>https://admission.utulsa.edu/apply/transfer-applicants/</u>).
- Final Semester at TCC: Congratulations you are about to earn you're A.S. in Mechanical Engineering! Be sure to apply for graduation @ <u>https://www.tulsacc.edu/student-resources/graduation</u>.



- **Transcripts:** Submit an official TCC transcript to TU (<u>www.tulsacc.edu/student-resources/student-r</u>
- Reverse Transfer: If you have not earned an Associate in Arts or an Associate in Science from TCC, and have
 completed 60 credit hours, with 15 of those hours completed at TCC, email <u>reversetransfer@tulsacc.edu</u> to see if
 you qualify for a degree through the Reverse Transfer program.

Learn More About Programs in this Pathway:

- TCC A.S. Mechanical Engineering <u>https://www.tulsacc.edu/programs-and-courses/academic-programs/engineering-mechanical-engineering</u>
- TU B.S. Mechanical Engineering https://engineering.utulsa.edu/mechanical-engineering/

University Transfer Contact Information

University Transfer Office Tulsa Community College <u>www.tulsacc.edu/transfer</u> Contact: <u>tcc2university@tulsacc.edu</u> Amy Stroud Transfer Credit and Articulation Specialist University of Tulsa Contact: 918-631-2224, <u>transfer-evals@utulsa.edu</u>