



## Associate in Science in Engineering, Mechanical Engineering at Tulsa Community College to Bachelor of Science in Mechanical Engineering at University of Tulsa

**69 Credit Hours at TCC + 63 Credit Hours at TU = 132 Total Credit Hours**

**Transfer Map Catalog Year:** 2022-2023

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

**Note to Students:** Transfer maps provide a semester by semester guide to a bachelor's degree program showing course by course equivalency. This transfer map is based on a full-time schedule and is just one example of how a student may successfully complete degree requirements for these programs. Students should work with a TCC advisor and the university to ensure they are on-time and on-track for transfer. Students are responsible for understanding the program/admission/transfer requirements for the university and for completing requirements in the official degree sheet for each major.

<b>TULSA COMMUNITY COLLEGE – SEMESTER ONE</b>		
<b>TCC Course</b>	<b>TU Equivalent Course</b>	<b>Credit Hours</b>
ENGL 1113 Composition I	FREL 1003 Free Elective	3
*MATH 2114 Analytic Geometry & Calc. I	MATH 2014 Calculus I	4
ENGR 1111 Introduction to Engineering	FREL 1001 Free Elective	1
CHEM 1315 General Chemistry I or CHEM 1365 Chemistry for Engineers	CHEM 1013/1011 (4 credits) & FREL 1001 (1 credit) <b>OR</b> CHEM 1033/1011 (4credits) & FREL 1001 (1 credit)	5
HIST 1483 U.S. Hist. 1492 to the Civil War Era <u>or</u> 1493 U.S. Hist. Civil War Era to the Present	HIST 2503 (Block II) American Republic	3
<b>Semester Credit Hours at TCC:</b>		<b>16</b>

\*MATH PLACEMENT/ PRE-REQUISITES: 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.

<b>TULSA COMMUNITY COLLEGE – SEMESTER TWO</b>		
<b>TCC Course</b>	<b>TU Equivalent Course</b>	<b>Credit Hours</b>
ENGL 1213 Composition II	ENGL 1033 Exposition & Argumentation	3
MATH 2124 Analytic Geometry & Calculus II	MATH 2024 Calculus II	4
ENGR 1132 Engineering Design with Computer Aided Design	ME 1212 Mechanical Engineering Graphics	2
ENGR 1242 Introductory Engineering Computer Programming	FREL 1002 Free Elective	2
PHYS 2034 Physics I with Calculus	PHYS 2053/2051 General Physics I lecture and Lab	4
3 hour Humanities ( <a href="#">from TU Block I List</a> )	TU Block I	3
<b>Semester Credit Hours at TCC:</b>		<b>18</b>

**TULSA COMMUNITY COLLEGE – SEMESTER THREE**

<b>TCC Course</b>	<b>TU Equivalent Course</b>	<b>Credit Hours</b>
PHYS 2124 Physics II with Calculus	PHYS 2063/2061	4
ENGR 2103 Engineering Statics	ES 2013 Statics	3
ENGR 2213 Thermodynamics	ES 3053 Thermodynamics	3
MATH 2134 Analytic Geometry & Calculus III	MATH 2073 Calculus III (3 credits) FREL 1001 Free Elective (1 credit)	4
MATH 2613 Elem. Differential Equations	MATH 3073 Differential Equations	3
<b>Semester Credit Hours at TCC:</b>		<b>17</b>

**TULSA COMMUNITY COLLEGE – SEMESTER FOUR**

<b>TCC Course</b>	<b>TU Equivalent Course</b>	<b>Credit Hours</b>
3 hour. Humanities ( <a href="#">from TU Block I List</a> )	Block I	3
Required Elective ( <a href="#">on TU Block II List</a> )	Block II	3
ENGR 2523 Elementary Dynamics	ME 2023 Introduction to Dynamics	3
ENGR 2143 Eng. Strength of Materials	ES 3023 Mechanics Materials	3
ENGR 2613 Intro. to Electrical Science	ECE 2003 Electric Circuit Analysis	3
POLS 1113 American Federal Government	POL 2053 (Block II) Governing Ideas	3
<b>Semester Credit Hours at TCC:</b>		<b>18</b>

**Congratulations you have earned your Associate Degree from TCC! Time to celebrate!**

**UNIVERSITY OF TULSA – SEMESTER FIVE**

<b>TU Course</b>	<b>Credit Hours</b>	
FYE 1001 First Year Experience	1	
ES 2513 Engineering Applications Programming	3	
ES 3003 Introductory Fluid Mechanics	3	
ME 3033 Properties of Materials	3	
ME 1123/1120 Design & Manufacturing (lecture & lab)	3	
ME 2001 Professional Aspects of Mechanical Engineering	1	
ECE 2001 Basic Electrical Measurements Laboratory	1	
<b>Semester Credit Hours at TU:</b>		<b>15</b>

**UNIVERSITY OF TULSA – SEMESTER SIX**

<b>TU Course</b>	<b>Credit Hours</b>	
ME 2123/2120 Materials & Technology (lecture & lab)	3	
ME 3063 Manufacturing Processes	3	
ME 3033 Properties of Materials	3	
Math or Science Elective Choose from: MATH 3013, MATH 3033, MATH 4123, MATH 4143, STAT 4813, BIOL 1603, CHEM 1023, PHYS 2063, GEOL 1014	3	
ES 3073 Heat Transfer	3	
Block II Historic and Social Interpretation Finance or Economics	3	
<b>Semester Credit Hours at TU:</b>		<b>15</b>

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

**UNIVERSITY OF TULSA – SEMESTER SEVEN**

<b>TU Course</b>	<b>Credit Hours</b>	
ENGL 3003 Writing for the Professions	3	
ME 4383 Mechanical Engineering Design	3	
ME 4053 System Dynamics & Controls	3	
ME 3123/3120 (lecture & lab)	3	
ME Thermal Elective	3	
ME ELECTIVE	3	
<b>Semester Credit Hours at TU:</b>		<b>18</b>

## UNIVERSITY OF TULSA – SEMESTER EIGHT

TU Course	Credit Hours
ME 4293 Interdisciplinary Design Projects	3
ME 4123/4120 Thermal Science (lecture & lab)	3
Computational Elective Choose from: ME 4033, ME 4093, MATH 4503	3
ME Elective	3
ME Elective	3
<b>Semester Credit Hours at TU:</b>	<b>15</b>

**Congratulations you have earned your Bachelor's Degree from TU! Time to celebrate!**

### TCC 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 The 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:** During or right after semester three coursework, apply for admission at The University of Tulsa as a transfer student (<https://admission.utulsa.edu/apply/transfer-applicants/>).
- **Final Semester at TCC:** Congratulations you are about to earn your Associate Degree! Be sure to apply for graduation @ <https://www.tulsacc.edu/student-resources/graduation>.
- **Transcripts:** After your final semester, submit an official TCC transcript to TU ([www.tulsacc.edu/student-resources/student-records/requesting-and-submitting-transcripts](http://www.tulsacc.edu/student-resources/student-records/requesting-and-submitting-transcripts)).
- **Reverse Transfer:** Students who transfer to a university before completing an associate degree and who have earned at least 15 credit hours from TCC may be eligible to complete their TCC degree through Reverse Transfer. Email [reversetransfer@tulsacc.edu](mailto:reversetransfer@tulsacc.edu) to see if you qualify for a degree through the Reverse Transfer program (<https://www.tulsacc.edu/student-resources/graduation/reverse-transfer>).

### 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.

### TU Tuition Costs:

- Full-time students pay a flat tuition rate each semester they are enrolled in 12 – 18 hours. Any semester where a student is enrolled in 11 hours or less are billed per semester hour. Any semester with an approved overload above 18 hours has additional tuition costs on top of the flat tuition rate to cover the additional hours. Tuition costs and associated student fees are posted at [Tuition & Costs - The University of Tulsa \(utulsa.edu\)](#). The degree map above has been divided to maximize enrollment versus tuition cost each semester. A student that chooses to enroll in fewer than 12 hours or more than 18 in any particular semester should be prepared for different tuition costs.

### Learn More About Programs in this Pathway:

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

### University Transfer Contact Information

University Transfer Office  
Tulsa Community College  
[www.tulsacc.edu/transfer](http://www.tulsacc.edu/transfer)  
Contact: [tcc2university@tulsacc.edu](mailto:tcc2university@tulsacc.edu)

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University of Tulsa  
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