



### TMU Graduation Requirements

Complete a minimum of 121 semester units of credit.  
Complete a minimum of 40 semester units in upper division courses. Includes 300 & 400 level courses.  
Satisfy all General Education requirements.  
Complete the required curriculum for the chosen major's field(s) of study.  
Maintain a minimum GPA of 2.00 (cumulative) in all TMU Courses. *Some majors have different GPA requirements.*  
Complete a minimum of 32 semester units at TMU, not including Directed Studies coursework.  
A maximum of 12 units can be transferred to complete degree requirements after the last 12 units taken at TMU.

## GENERAL EDUCATION

**SCRIPTURE SET** *Students transferring with  $\geq 61$  total units may need to satisfy fewer than 7 Bible G.E. courses as evaluated and confirmed by the Registrar's Office prior to the start of the student's first undergraduate semester. All other students must satisfy all 7 Bible G.E.*

Units Term

|   |  |                                      |
|---|--|--------------------------------------|
| 3 |  | B121 Essentials of Christian Thought |
| 3 |  | B101 Old Testament Survey I          |
| 3 |  | B102 Old Testament Survey II*        |
| 3 |  | B201 New Testament Survey I*         |

Units Term

|    |       |                                                        |
|----|-------|--------------------------------------------------------|
| 3  |       | B202 New Testament Survey II                           |
| 3  |       | BTH321 Christian Theology I                            |
| 3  |       | BTH322 Christian Theology II                           |
| 21 | Total | <i>*Or Non-Biblical Studies: IBEX300 with approval</i> |

**WORLDVIEW AND SKILLS SET** *Depending on the student's major, certain G.E. requirements allow for substitutions.*

Units Term

Course

Substitution

|    |       |                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                            |
|----|-------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3  |       | C100 Spoken Communication                                                            | <u>Biblical Studies</u> : BMN312 Message Preparation for Women, or BMN371 Sermon Preparation.<br><u>Business Administration, Entrepreneurship, Marketing Media, &amp; Sport Management</u> : MGT330 Business Communication.<br><u>BM Music</u> : not required.                                                                                                                                             |
| 3  |       | E110 English Composition                                                             | 31+ score ACT: English Section<br>3+ score AP Language & Composition Exam<br>3+ score AP Literature & Composition Exam<br>5+ score Criterion Online Writing Evaluation Service from ETS<br>700+ score SAT 1: Evidence-Based Reading & Writing section<br>10+ score WriterPlacer exam from Collegeboard                                                                                                     |
| 3  |       | ECN200 Essentials of Economics & Society                                             | <u>BM Music</u> : not required.                                                                                                                                                                                                                                                                                                                                                                            |
| 3  |       | H211 Essentials of World History I                                                   | <u>ALL</u> : Pass World History Competency Exam & 3 units of Upper Division History units.                                                                                                                                                                                                                                                                                                                 |
| 3  |       | H212 Essentials of World History II                                                  | <u>BM Music</u> : H211 or H212. <u>Single Subject Teaching Credential</u> : both H211 & H212.                                                                                                                                                                                                                                                                                                              |
| 3  |       | H230 Essentials of U.S. History                                                      | n/a                                                                                                                                                                                                                                                                                                                                                                                                        |
| 3  |       | Literature Elective                                                                  | Does not include: E330, E322, E353, E364, E435, E436, E491A, E491B. <u>BM Music</u> : not required.                                                                                                                                                                                                                                                                                                        |
| 3  |       | Literature Survey                                                                    | E200 Great Works of Literature Survey, E211 English Literature I, E212 English Literature II, E221 World Literature I, E222 World Literature II, E231 American Literature I, or E232 American Literature II.                                                                                                                                                                                               |
| 3  |       | LS150 Essentials of Biology<br>or GS150 Essentials of Geology                        | <u>Biological &amp; Physical Science</u> : LS151 Organismic Biology, LS151L Organismic Biology Lab.<br><u>Engineering</u> : CH151 General Chemistry I, CH151L General Chemistry I Lab.                                                                                                                                                                                                                     |
| 1  |       | LS150L Essentials of Biology Lab<br>or GS150L Essentials of Geology Lab              | <u>Kinesiology</u> : LS151 Organismic Biology, LS151L Organismic Biology Lab.                                                                                                                                                                                                                                                                                                                              |
| 3  |       | MA240 Critical Thinking & Quantitative Analysis                                      | <u>Business Administration, Entrepreneurship, Marketing Media, &amp; Sport Management</u> : BUS310 Statistics for Business.<br><u>Computer Science, Engineering, &amp; Mathematics</u> : not required.<br><u>ALL</u> : MA101 College Algebra & MA102 Trigonometry, or MA121 Calculus, or MA260 Elementary Statistics.                                                                                      |
| 3  |       | MU190 Essentials of Music & Art                                                      | <u>ALL</u> : ART338 Art History of the Western World. <u>Biblical Studies</u> : BMN333/MU333 Worship & Songs of the Church. <u>Music</u> : MU295 Music & Art for Musicians.                                                                                                                                                                                                                                |
| 3  |       | P311 Essentials of Philosophy                                                        | <u>Biblical Studies</u> : BCW363 Apologetics. <u>Music Production</u> : BCW367 Ethics.<br><u>Business Administration, Entrepreneurship, Marketing Media, &amp; Sport Management</u> : BUS330 Business Ethics.<br><u>English Ed., History Ed., Liberal Studies/Elementary Ed., Liberal Studies/Special Ed., Life Sciences Ed., Mathematics Ed., Music Ed.</u> : P321 History and Philosophies of Education. |
| 3  |       | POL220 U.S. Government                                                               | Only waived for non-U.S. citizens and non-resident aliens. U.S. Citizens (regardless of current country of residence) and resident aliens are NOT exempt.                                                                                                                                                                                                                                                  |
| 40 | Total | (37 for Computer Science, Engineering & Mathematics majors, 28 for BM Music majors.) |                                                                                                                                                                                                                                                                                                                                                                                                            |

### ENGINEERING CORE COURSES

Units Term

|   |  |                                             |
|---|--|---------------------------------------------|
| 4 |  | CH151 General Chemistry I*                  |
| 1 |  | CH153 Chemistry for Engineers               |
| 3 |  | CS121P Introduction to Computer Programming |
| 1 |  | EGR101 Introduction to Engineering Design   |
| 3 |  | MA121 Calculus I                            |
| 3 |  | MA122 Calculus II                           |
| 3 |  | MA221 Calculus III                          |

Units Term

|   |  |                                       |
|---|--|---------------------------------------|
| 3 |  | MA231 Linear Algebra                  |
| 3 |  | MA253 Discrete Mathematics            |
| 3 |  | MA282 Ordinary Differential Equations |
| 3 |  | MA365 Probability                     |
| 4 |  | PS251 General Physics I*              |
| 2 |  | EGR112 Theology of Technology         |
| 1 |  | EGR491 Senior Capstone                |

37 Total \*with corresponding lab.

### MAJOR: COMPUTER ENGINEERING

Units Term

|   |  |                                             |
|---|--|---------------------------------------------|
| 3 |  | CS132S Data Structures & Algorithms         |
| 3 |  | CS202H Computer Hardware                    |
| 3 |  | CS301A Computer Organization & Architecture |
| 3 |  | CS321O Operating Systems                    |
| 2 |  | ECE301 Semiconductors                       |
| 3 |  | ECE311 Analog Circuits                      |
| 1 |  | ECE311L Analog Circuits Lab                 |
| 3 |  | ECE312 Microelectronics                     |
| 2 |  | ECE312L Microelectronics Lab                |

Units Term

|   |  |                                       |
|---|--|---------------------------------------|
| 3 |  | ECE321 Digital System Design          |
| 1 |  | ECE321L Digital Design Lab            |
| 3 |  | ECE322 Signals and Systems            |
| 3 |  | ECE401 Digital Signal Processing      |
| 1 |  | ECE401L Digital Signal Processing Lab |
| 1 |  | ECE401E DSP Extension                 |
| 1 |  | ECE492A Senior Design Project A       |
| 2 |  | ECE492B Senior Design Project B       |
| 3 |  | ECS Upper Division Electives          |

78 Total (including Core courses)

### MAJOR: ELECTRICAL ENGINEERING

Units Term

|   |  |                                     |
|---|--|-------------------------------------|
| 3 |  | CS132S Data Structures & Algorithms |
| 3 |  | CS202H Computer Hardware            |
| 3 |  | ECE202 Electromagnetics             |
| 1 |  | ECE202L Electromagnetics Lab        |
| 2 |  | ECE301 Semiconductors               |
| 3 |  | ECE311 Analog Circuits              |
| 1 |  | ECE311L Analog Circuits Lab         |
| 3 |  | ECE312 Microelectronics             |
| 2 |  | ECE312L Microelectronics Lab        |

Units Term

|   |  |                                       |
|---|--|---------------------------------------|
| 3 |  | ECE321 Digital System Design          |
| 1 |  | ECE321L Digital Design Lab            |
| 3 |  | ECE322 Signals and Systems            |
| 3 |  | ECE401 Digital Signal Processing      |
| 1 |  | ECE401L Digital Signal Processing Lab |
| 3 |  | ECE412 Power Systems                  |
| 1 |  | ECE492A Senior Design Project A       |
| 2 |  | ECE492B Senior Design Project B       |
| 3 |  | ECS Upper Division Electives          |

78 Total (including Core courses)

### MAJOR: MECHANICAL ENGINEERING

Units Term

|   |  |                                        |
|---|--|----------------------------------------|
| 3 |  | ECE202 Electromagnetics                |
| 1 |  | ECE202L Electromagnetics Lab           |
| 3 |  | ME211 CAD & SolidWorks                 |
| 1 |  | ME211L CAD Lab                         |
| 3 |  | ME301 Statics & Mechanics of Materials |
| 1 |  | ME301L Statics Lab                     |
| 3 |  | ME302 Dynamics                         |
| 1 |  | ME302L Dynamics Lab                    |
| 3 |  | ME311 Thermodynamics                   |

Units Term

|   |  |                                |
|---|--|--------------------------------|
| 3 |  | ME312 Heat Transfer            |
| 3 |  | ME321 Machine Design           |
| 3 |  | ME322 Design & Manufacturing   |
| 2 |  | ME322L Manufacturing Project   |
| 3 |  | ME331 Fluid Mechanics          |
| 2 |  | ME401 Finite Element Analysis  |
| 1 |  | ME492A Senior Design Project A |
| 2 |  | ME492B Senior Design Project B |
| 3 |  | ECS Upper Division Electives   |

78 Total (including Core courses)