# ARTICULATION AGREEMENT PROGRAM GUIDE

## Associate in Applied Science
**Technological Sciences**
**Oakland Community College**

### Sciences Major Focus
Select a primary focus of a minimum of 16 credits with the same prefix from any one of the following occupational disciplines: AUT, CAD, CIS, EEC, INT, MCT, MTT, PHO, or ROB

### Required Supportive Courses
Select a minimum of 14 credits, in any combination of courses from the following list of prefixes. (Courses previously used in Major Focus may not be used to meet this requirement.)

- CHE 1510 General Chemistry I
- *CIS 2252 Object-Oriented Programming (C++)
- PHY 1610 College Physics I
- PHY 1620 College Physics II

### Total credit hours for Program-Related Courses
24 CH

## Bachelor of Science
**Manufacturing and Mechanical Engineering Technology**
**Lawrence Technological University**

### Technical Electives
15 CH

### General Elective Credit
3 CH

- CHM 1154 Intro to Chemistry Principles w/lab
- TME 2003 Computer Aided Analysis
- PHY 2213/2221 College Physics 1 & lab
- PHY 2223/2231 College Physics 2 & lab

## General Education Requirements

### Communication / English
- ENG 1520 Composition 2

### Mathematics / Science
- MAT1630 Pre-Calculus

### Social Science
- ECON 2610 Economics I

### Written Communication
- *ENG 2200 Professional Communication

### Additional BSMMET Requirements
- BUS 1310 Supervision or MGT 2530 Management
- MAT 1730 Calculus I

### Fine Arts / Humanities
(MTA applicable, from a different subject area used in the Additional Required Credits area.)

- COM 1103 College Composition
- COM 2103 Technical & Professional Com.
- ECON 2610 Economics I
- MCS 1074 Precalculus
- MCS 1414 Calculus 1
- LLT 1223 World Masterpieces 2

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* COM 1500 Composition 2
* MATH 1101 Calculus I
**Social Sciences**  
(MTA applicable, from different subject areas and non-Economics courses.)  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>CH</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSC 2413</td>
<td>Found. of the American Experience</td>
<td>6</td>
</tr>
<tr>
<td>SSC 2423</td>
<td>Found. of the American Experience</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Credit Hours Taken at OCC: 67 CH  
Total OCC Credit Hours Granted by LTU: 65 CH

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**ARTICULATION AGREEMENT PROGRAM GUIDE**

**Bachelor of Science**  
**Manufacturing and Mechanical Engineering Technology**  
**Lawrence Technological University**

**Remaining LTU Degree Requirements (62 Credit Hours)**

**Required Courses (62 Credit Hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>CH</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 3000</td>
<td>Writing Prof Exam</td>
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<tr>
<td>EGE 3022</td>
<td>Leadership &amp; Professional Development for Engineers</td>
<td>2</td>
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<tr>
<td>HUM XXX3</td>
<td>LLT/SSC/PSY (3000 or 400 level)</td>
<td>3</td>
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<tr>
<td>HRM 3023</td>
<td>Human Resource Management</td>
<td>3</td>
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<tr>
<td>MCS 3324</td>
<td>Applied Calculus &amp; Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>MGT 3113</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>TEE 3103</td>
<td>DC/AC Circuits</td>
<td>3</td>
</tr>
<tr>
<td>TEE 4214</td>
<td>Embedded Processors</td>
<td>4</td>
</tr>
<tr>
<td>TEE 4224</td>
<td>Transducers &amp; Instruction</td>
<td>4</td>
</tr>
<tr>
<td>TIE 3063</td>
<td>Manufacturing Engineering Processes</td>
<td>3</td>
</tr>
<tr>
<td>TIE 3163</td>
<td>Engineering Economic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>TIE 3203</td>
<td>Technical Project Management</td>
<td>3</td>
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<tr>
<td>TIE 4115</td>
<td>Senior Project</td>
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<tr>
<td>TME 3113</td>
<td>Engineering Mechanics</td>
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<tr>
<td>TME 3204</td>
<td>Applied Thermo-Fluids</td>
<td>4</td>
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<tr>
<td>TME 3333</td>
<td>Six Sigma 1</td>
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<tr>
<td>TME 4103</td>
<td>Engineering Materials</td>
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<tr>
<td>TME 4113</td>
<td>Computer Design Graphics</td>
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<tr>
<td>TME 4343</td>
<td>Six Sigma 2</td>
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<tr>
<td>TME 4413</td>
<td>Lean Manufacturing</td>
<td>3</td>
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</tbody>
</table>

Total Credit Hours Taken at LTU: 62 CH  
Total Credit Hours Required for Degree: 127 CH
Notes:
- Students must have an overall GPA of a 2.0 in order to be eligible for admission consideration to Lawrence Technological University (LTU).
- Students should meet with an OCC Counselor prior to following this Articulation Agreement Program Guide.
- Deviation from this guide may result in non-transferable and/or applicable OCC coursework, resulting in additional requirements.
- This guide does not include any remedial courses and may not include prerequisite requirements.
- This Articulation Agreement Program Guide includes the remaining Michigan Transfer Agreement (MTA) and additional LTU degree/program requirements beyond the A.A.S. degree requirements.
- Lawrence Technical University requires that a minimum of a “C” (2.0) be earned in each course in order to be considered for transfer credit, non-germane and remedial courses may not qualify for transfer credit.
- The Michigan Transfer Agreement (MTA) requires a minimum of a “C” (2.0) grade be earned in each applicable course in order to fulfill the category requirement and to receive the MTA endorsement. If a student completes the MTA at Oakland Community College, then MTA approved courses will take precedence over General Education courses listed on the Articulation Agreement. If a student chooses not to complete the MTA at Oakland Community College, then the student must complete courses as listed in the General Education section in Articulation Agreement.
- *Only three (3) of the four (4) credit hours for CIS 2252 and ENG 2200 will granted upon transfer to LTU.
- **Michigan Transfer Agreement (MTA) applicable courses are listed in the OCC Catalog. The Fine Arts/Humanities, Social Sciences and Natural Sciences requirements must be from two different disciplines.

For questions regarding the transferability of coursework not reflected on the guide, please contact Lawrence Technological University’s Assistant Director of Admissions/Transfer Articulation Coordinator, Emily Phelan, at: (248)204-3169, ephelan@ltu.edu. To schedule an appointment with an advisor please contact Madonna University at (734)432-5339, admissions@madonna.edu.

July 1st, 2020 – June 30th, 2024