### MACRAO Requirements (32-35 credits)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>OCC Credits</th>
<th>EMU Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. English Writing Requirement</strong></td>
<td>(6 credits)</td>
<td>(6 credits)</td>
</tr>
<tr>
<td>ENG 1510 Composition I</td>
<td>3</td>
<td>ENGL 120 Composition I</td>
</tr>
<tr>
<td>ENG 1520 Composition II</td>
<td>3</td>
<td>ENGL 121 Composition II</td>
</tr>
<tr>
<td><strong>2. Math/Science Requirement</strong></td>
<td>(8-11 credits)</td>
<td>(8-11 credits)</td>
</tr>
<tr>
<td>Complete one math option:</td>
<td>4-7</td>
<td>One option:</td>
</tr>
<tr>
<td>*MAT 1540 College Alg (4) (Complete at OCC) and</td>
<td></td>
<td>MATH 105 College Algebra (3)+1</td>
</tr>
<tr>
<td>*MAT 1560 Trigonometry (3)</td>
<td></td>
<td>MATH 107 Plane Trigonometry (2)+1</td>
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<tr>
<td>OR</td>
<td></td>
<td>MATH 105 &amp; MATH 107 (5)</td>
</tr>
<tr>
<td>*MAT 1630 College Alg &amp; Trig (4) (Complete at OCC)</td>
<td></td>
<td>CHEM 117/118 Fund of Chemistry with Lab (4)</td>
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<tr>
<td>Complete one course:</td>
<td>4</td>
<td>One course:</td>
</tr>
<tr>
<td>*CHE 1000 Introductory Chemistry (4)</td>
<td></td>
<td>CHEM 221 Mechanics, Sound &amp; Heat (4)</td>
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<tr>
<td>*PHY 1610 College Physics I (4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3. Social Science Requirement</strong></td>
<td>(9 credits)</td>
<td>(9 credits)</td>
</tr>
<tr>
<td>Complete two courses:</td>
<td>6</td>
<td>Two courses:</td>
</tr>
<tr>
<td>POL 1510 American Government (OCC graduation req)</td>
<td>3</td>
<td>Courses may transfer as equivalent courses, General Education transfer credit, or general transfer credit</td>
</tr>
<tr>
<td>Choose from courses approved by OCC to satisfy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The MACRAO social science requirement. At least</td>
<td></td>
<td></td>
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<tr>
<td>one discipline other than POL must be used.</td>
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<td></td>
</tr>
<tr>
<td><strong>4. Humanities Requirement</strong></td>
<td>(9 credits)</td>
<td>(9 credits)</td>
</tr>
<tr>
<td>Complete three courses (choose at least two disciplines):</td>
<td>9</td>
<td>Three courses:</td>
</tr>
<tr>
<td>Choose from courses approved by OCC to satisfy</td>
<td></td>
<td>Courses may transfer as equivalent courses, General Education transfer credit, or general transfer credit</td>
</tr>
<tr>
<td>The MACRAO humanities requirement.</td>
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</tr>
</tbody>
</table>

**NOTE:** In completing MACRAO requirements, choose at least one course from the following to satisfy EMU’s Perspectives on a Diverse World requirement: Humanities: ART 1700; ENG 1610, 2530, 2540; HUM 1710; MUS 1585; Social Science: ANT 1540, 2510, 2750; GEO 1520; HIS 1520, 1550, 2610, 2620; POL 2530, 2610; SOC 2530, 2560. The MACRAO transfer guide for OCC can be found at [http://it.emich.edu/service/online/tranequiv/](http://it.emich.edu/service/online/tranequiv/).

### Technical Concentration (34 credits)

* Thirty-four (34) credits in technical courses from an approved OCC program or discipline may be transferred as a block for the technical concentration. If the program has less than 34 credits, approved technical courses may be taken at either institution to make up the difference....34

### EMU Requirements That May be Taken at OCC or EMU (28 credits)

* Complete the course not already taken for MACRAO: ......4
  - CHE 1000 Introductory Chemistry (4)
  - PHY 1610 College Physics I (4)
  - PHY 1620 College Physics II (4)
* Open Electives (not to exceed 94 credits at OCC) ...... 17-20

### Maximum Credits at OCC: .........................94

* Required for EMU's Applied Technology program.
MAT 1540 or 1630 must be completed at OCC to satisfy EMU's Quantitative Reasoning Requirement. If completed at EMU, MATH 110 will also be required.

The number of elective credits required will vary depending on the amount of credit completed for the technical concentration and other course choices. See program advisor for guidance.

NOTE: Students who want to complete a certificate or associate degree should consult an OCC counselor to select the appropriate courses. See page 2 for list of approved programs.

Oakland Community College – Approved Technical Programs
Eastern Michigan University – Bachelor of Science in Applied Technology

Completion of Applied Technology program at EMU

Major Requirements (24 credits)
SET 350W Applied Technical Writing ................................................ 3
** Restricted Electives ........................................................................... 6
Select six hours at the 100 to 400-level in consultation with an Applied Technology program adviser.

** Restricted Electives ......................................................................... 15
Select fifteen hours of restricted electives at the 300-400-level in consultation with an Applied Technology program adviser.

Additional Requirement (0-3 credits)
1 One LBC course or noncredit experience must be completed. MFG 387 Coop in Manufacturing Technology satisfies the LBC requirement.

University Electives (3-6)
Enough electives to bring the program total to 124 credits .......... 3-6

Minimum Credits at EMU: ......................................................... 30
Minimum Credits Required to Graduate .................. 124

1 Meets EMU’s Learning beyond the Classroom General Education requirement.
** All restricted electives must be approved by an Applied Technology Program Advisor.

Students may complete the Applied Technology Program on-line. EMU offers 30 credit hours of Applied Technology coursework over the internet. Such coursework will include the major requirements (Restricted Electives) and an additional nine credit hours of appropriate university electives.

Approved Technical Programs at Oakland Community College

Architecture
Automobile Servicing
Ceramic Technology
Collision Auto Repair
CAD & Drafting Technology – All Options
Computer Support Engineering Technology
Computer Information Systems - All Options
Electrical Trades Technology-all options
Environmental Systems Technology – All Options
Graphic Design

Industrial Tech/Technical Apprentice/Skilled Trades
Interior Design
Machine Tool Numerical Control Technology
Machine Tool Technology
Photographic Technology
Robotics/Automated Systems Technology
Technological Sciences
Welding Technology
Other programs may be used with approval of the Applied Technology Program Adviser

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Additional Information:

1. In completing the coordinated program of study for this articulation agreement, course substitutions should be made with the guidance of the advisors (indicated below) at both institutions to assure that all requirements are satisfied. Courses indicated with an * are required for EMU’s Applied Technology Program.

2. Students whose transcripts are endorsed as “MACRAO Satisfied” will only be required to meet EMU’s three general education requirements, noted with a “1” on the articulation guide and listed below. These requirements may be completed at the most appropriate time for the student whether before or after admission to EMU:
   a) an approved course in Quantitative Reasoning: [MAT 1540 or MAT 1630 at OCC]
   b) an approved course in Global Awareness or US Diversity: [Humanities: ART 1700; ENG 1610, 2530, 2540; HUM 1710; MUS 1585; Science: BIO 1500; Social Science: ANT 1540, 2510, 2750; GEO 1520; HIS 1520, 1550, 2610, 2620; POL 2530, 2610; SOC 2530, 2560; Other Courses: BUS 2150; COM 2290 at OCC]
   c) an approved Learning Beyond the Classroom course or experience offered by EMU: [MFG 387 or other approved option at EMU]

To use MACRAO, students should request a MACRAO evaluation of their transcript from the OCC Registration and Records Office. Students who do not satisfy MACRAO will have to satisfy all of EMU’s general education requirements not already completed.

3. Only courses with a grade of “C” or better (2.0 on a 4.0 scale) will be accepted for transfer to EMU. A course completed with a grade of less than 2.0, even though it is counted toward graduation at the community college and used to satisfy MACRAO, will not transfer and will have to be repeated if it is a requirement of the Applied Technology program at EMU.

4. Under this agreement, EMU will waive the 60-hour rule and require that a minimum of 30 credit hours must be completed at EMU, 15 hours of which must be in program requirements at the 300-level or above. Of the last 30 hours completed before graduating, a minimum of 10 credit hours must be in courses offered by EMU. A minimum of 124 credit hours, completed in-residence or accepted in transfer, is required for graduation.

5. Students must meet all admission requirements at the time of application for admission to EMU, including submitting transcripts from all previously attended colleges. OCC students will receive equal consideration with other students for course registration and financial aid.

6. Students are encouraged to contact the Applied Technology Program Coordinator early, before applying to EMU. To facilitate the evaluation of transcripts, students should indicate they are using this articulation agreement on their EMU admission application, and bring a copy of this guide to all advising sessions. Copies of the articulation guide are available on EMU’s webpage at www.emich.edu/ccr/artguide.htm.


This is a renewal of the agreement made on May 15, 2006. Students who began the program prior to the effective date may continue to follow the guide that was in place at the time they started or may follow this guide. If this agreement is not renewed at the end of the effective period, students who already started the program will be given three additional years to be admitted to EMU under the terms of this agreement.

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