CONSTRUCTION MANAGEMENT ARTICULATION AGREEMENT GUIDE
Washtenaw Community College – A.A. in Construction Management
Eastern Michigan University – B.S. in Construction Management

Washtenaw Community College Courses: Transfer to Eastern Michigan University as:

**Michigan Transfer Agreement (MTA) Requirements (30-31 credits)**

Students with the MTA endorsement on their community college transcript have satisfied EMU's General Education Core Requirements and will be required to complete only the EMU General Education Application Requirements of one Perspectives on a Diverse World course, one Learning beyond the Classroom experience, and one Writing Intensive course in the major. Specific courses listed below for the MTA will also satisfy major or program requirements at WCC and/or EMU. Students who started before Fall 2014 may continue to follow the MACRAO Agreement until the end of summer 2019. MACRAO versions of articulation guides are posted online. For courses approved to satisfy the MTA go to the WCC website: [http://www.wccnet.edu/services/transferresources/mta/](http://www.wccnet.edu/services/transferresources/mta/).

1. **A Course in English Composition**
   - ENG 111 Composition I ....................................................... 4
   - University Elective .......................................................... 4

2. **A Second Course in English Composition or Communication**
   - ENG 226 Composition II .................................................... 3
   - University Elective .......................................................... 3

3. **A Course in Mathematics**
   - MTH 160 Basic Statistics .................................................. 4
   - MATH 170 Elementary Statistics ........................................ 4
   - *CMG 170 Construction Graphics .................................... 3
   - CMST 228 Construction Graphics .................................... 3

4. **Two Courses in Natural Science from different disciplines (one lab required)**
   - *GLG 114 Physical Geology .............................................. 4
   - ESSC 110 Dynamic Earth Systems .................................. 4
   - *PHY 111 General Physics ............................................... 4
   - PHY 211 Mechanics, Sound, and Heat ............................. 4

5. **Two courses in Humanities from different disciplines**
   - Satisfy WCC Speech requirement ...................................... 3
   - University Elective .......................................................... 3
   - Choose from the approved MTA list ............................... 3
   - Perspectives on a Diverse World Requirement ................. 3

6. **Two courses in Social Science from different disciplines**
   - *ECO 211 Principles of Economics I .................................. 3
   - sub for ECON 100 or 200 (ECON 201) ............................ 3
   - Choose from the approved MTA list ............................... 3
   - University Elective .......................................................... 3

7. **If needed, complete additional courses in any of the above categories to satisfy the 30 credit minimum for the MTA.**

**EMU’s Perspectives on a Diverse World requirement:** Complete one course from the following list: Courses on this list satisfy an MTA area above: Humanities: ART 143, 150; COM 225; DAN 180; ENGL 181, 213, 214, 224, 242; HUM 150, 175; MUS 180;

Social Science: ANT 201; ECO 280; GEO 101; HST 123, 150, 210, 230, 235, 240, 270; PL 211; PSY 107, 251; SOC 205

**WCC Program Requirements (33 credits)**

- *ACC 111 Principles of Accounting I .................................. 3
- ACC 240 Principles of Financial Accounting ..................... 3
- *BMG 111 Business Law I .................................................. 3
- LAW 293 Legal Environment of Business .......................... 3
- *BMG 207 Business Communication .................................. 3
- MGMT 202 Business Communication ................................. 3
- *BMG 240 Human Resource Management .......................... 3
- subs for MGMT 384 Human Resource Management ............. 3
- CIST 100 Introduction to Computer Productivity Apps ....... 3
- CM Restricted Elective ...................................................... 3
- *CMG 130 Construction Site Safety & OSHA Regulations ...... 3
- CNST 213 Construction Safety .......................................... 3
- *CMG 150 Intro to Construction Management .................... 3
- CNST 125 Intro to Construction ......................................... 3
- *CMG 170 Construction Graphics ..................................... 3
- CNST 228 Construction Graphics ..................................... 3
- *CMG 180 Application of Construction Materials .............. 3
- CNST 202 Construction Materials ..................................... 3
- *CMG 200 Construction Systems ...................................... 3
- CNST 201 Construction Systems ....................................... 3
- *MTH 178 General Trigonometry .................................... 3
- MATH 107 Plane Trigonometry (2)+1 (CM Res Elective) ........ 3

**EMU requirements that may be taken at WCC or EMU (20 credits)**

- *MTH 176 College Algebra ................................................. 4
- University Elective .......................................................... 4
- MATH 105 College Algebra (CM Res Elective) ....................... 4
- CHEM 105 Fundamentals of Chemistry (4) ......................... 4-5
- CHEM 117/118 Fund of Chemistry & Lab (4) ....................... 4-5
- MATH 191 Calculus I (5) .................................................... 4-5
- MATH 120 Calculus I (4)+1 .............................................. 4-5
- MATH 140, MATH 265, ACC 122, or CIS 110 ............... 3
- Any College of Business course not already taken ............. 3
- CHEM 105 Fundamentals of Chemistry (4) ......................... 3
- MATH 120 Calculus I (4)+1 .............................................. 3
- Open electives (not to exceed 84 credits at WCC) .............. 8-9
- University electives ...................................................... 8-9

**Maximum Credits at WCC: ........................................ 84 Credits that transfer to EMU: ................................. 84**

* Requirement or prerequisite for EMU's Construction Management program.
1 Counts toward the 15 hours of Business Major Requirements for EMU's program.
2 Counts toward the 12 hours of Construction Management Restricted Electives required for EMU's program.

Sign up with us: If you let us know you are using this articulation agreement we can stay in touch with you and provide information and advising to you while you are still at your community college. Sign up at: [www.emich.edu/ccr/trackingsystem/Enter.php](http://www.emich.edu/ccr/trackingsystem/Enter.php)
## Completion of EMU's Construction Management Program

### Major Requirements (40 credits)

#### Required Courses (37 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNST 206</td>
<td>Surveying</td>
<td>3</td>
</tr>
<tr>
<td>CNST 229</td>
<td>Analysis of Commercial Prints</td>
<td>3</td>
</tr>
<tr>
<td>CNST 302</td>
<td>Contract Documents, Regulations &amp; Specs</td>
<td>3</td>
</tr>
<tr>
<td>CNST 303</td>
<td>Electrical, Mech &amp; Equipment Systems</td>
<td>3</td>
</tr>
<tr>
<td>CNST 304</td>
<td>Construction Estimating &amp; Bidding</td>
<td>3</td>
</tr>
<tr>
<td>CNST 361</td>
<td>Planning &amp; Scheduling</td>
<td>3</td>
</tr>
<tr>
<td>1CNST 385L</td>
<td>Cooperative Education (LBC)</td>
<td>1</td>
</tr>
<tr>
<td>CNST 403</td>
<td>Production Control</td>
<td>3</td>
</tr>
<tr>
<td>CNST 406W</td>
<td>Construction Law (Writing Intensive)</td>
<td>3</td>
</tr>
<tr>
<td>CNST 412</td>
<td>Fundamentals of Structural Design</td>
<td>3</td>
</tr>
<tr>
<td>CNST 436</td>
<td>Heavy/Highway Const Means &amp; Methods</td>
<td>3</td>
</tr>
<tr>
<td>CNST 440</td>
<td>LEED for New Const &amp; Major Renovations</td>
<td>3</td>
</tr>
<tr>
<td>CNST 450</td>
<td>Fund of Construction Project Mgmt</td>
<td>3</td>
</tr>
</tbody>
</table>

#### CM Restricted Elective (3 credits)

Complete three credits from below:

- CNST 426 Mechanical & Elect Const Applications (3)
- CNST 427 Industrial Construction (3)
- CNST 437 Environmental Construction Contracting (3)
- CNST 438 Fund of Land Development (3)
- CNST 479 Special Topics (3)
- CNST 497 Directed Study in CM Techniques (3)

### Credits at EMU:

- 40 credits

### Transfer Credits:

- 84 credits

### Total Credits:

- 124 credits

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### Suggested Sequence for completing the program:

Courses may not be offered every semester, consult the program advisor to complete a program of study.

**May take in any semester**

- **(4 credits)**
  - 3 CM Restricted Elective
  - 1 CNST 385L Cooperative Education (LBC Requirement)

**First Semester**

- **(12 credits)**
  - CNST 206 Surveying
  - CNST 229 Analysis of Commercial Prints
  - CNST 302 Contract Documents, Regulations & Specs
  - CNST 440 LEED for New Const. & Maj. Renovation

**Second Semester**

- **(12 credits)**
  - CNST 303 Electrical, Mech & Equipment Systems
  - CNST 304 Construction Estimating & Bidding
  - CNST 361 Planning & Scheduling
  - CNST 406W Construction Law (WI)

**Third Semester**

- **(12 credits)**
  - CNST 412 Fundamentals of Structural Design
  - CNST 403 Production Control
  - CNST 436 Heavy/Highway Construction Contracting
  - CNST 450 Fund of Construction Project Mgmt

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1. Satisfies EMU's “Learning beyond the Classroom” requirement and may be taken in any semester.
2. If sufficient credits are not transferred, additional credits must be completed at EMU to satisfy the 124 credit minimum to graduate.
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. Each institution will determine the satisfaction of their own individual program and degree requirements. WCC courses indicated with an * are required for EMU’s Construction Management Program.

2. Students with the MTA endorsement on their community college transcript have satisfied EMU’s General Education Core Requirements and will be required to complete only the General Education Application Requirements of one Perspectives on a Diverse World course, one “Learning beyond the Classroom” experience, and a Writing Intensive course in the major. The Perspectives on a Diverse World requirement may be transferred to EMU.

   Students must request that an official community college transcript, with “MTA Satisfied”, be sent to EMU’s Admissions Office. Students, who do not have this on their community college transcript, will be required to satisfy EMU’s general education requirements as listed in the Undergraduate Catalog. MTA requirements may be completed after admission to EMU, however, students should inform advisors at EMU that they intend to complete the MTA or they may be advised to complete additional courses for the general education program.

   Students who enrolled in college prior to September 2014 have until August 2019 to have their transcripts evaluated for MACRAO at the community college.

3. Only courses with a grade of “C” or better (2.0 on a 4.0 scale) will be accepted for transfer to EMU.

4. Under this agreement, EMU will waive the 60-hour rule and require that a minimum of 40 credit hours must be completed at the four-year college level, of which 30 hours must be in courses offered by EMU, with 15 hours in program requirements, at the 300-level or above. Of the last 30 hours completed before graduating, at least 10 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. Courses listed in this guide may be completed at the most opportune time for students, whether before or after admission to EMU, as long as appropriate pre-requisites are satisfied.

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

6. Students are encouraged to contact the EMU Construction Management Program Coordinator before applying to EMU. To facilitate advising and the evaluation of transcripts, sign up for this articulation agreement using the link [www.emich.edu/ccr/trackingsystem/Enter.php](http://www.emich.edu/ccr/trackingsystem/Enter.php) and bring a copy to all advising sessions.

Effective Dates: January 1, 2015 until January 1, 2018

This is a renewal of an agreement made in September 2002 and renewed in September 2007 and 2010. Students who began this program prior to the new effective date have the option of changing to this guide or may follow the guide they started under for up to seven years. If this agreement is not renewed at the end of the effective period, students who already began the program at WCC will have an additional three years to be admitted to EMU under the terms of the agreement.

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