Miami Dade College

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| colspan="5" | **AA Course Sequence Guide - Full-Time Enrollment**<br>**Engineering - Computer Pathway**<br>**Associate in Arts Degree \| Code: (10705) \| 60 Credits**<br>**Effective Term: Fall 2025 (2257)** |
| **SEMESTER** | **Course ID** | **Course Title** | **Credits** | **Pre/Corequisites** |
| **Semester 1** | ENC 1101 (W) | English Composition 1 | 3 | Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption). |
| | EGN 1008C | Introduction to Engineering | 3 | |
| | *Humanities* | ARH 1000, HUM 1020, LIT 2000 (W), MUL 1010, PHI 2010 (W), THE 2000 (W) | 3 | Prerequisite for LIT 2000: ENC 1101 |
| | MAC 1105 (C) | College Algebra | 3 | Prerequisite: MAT 1033♦<br>♦Students must seek advisement for proper mathematics course from discipline chairperson. |
| | SLS 1106 | First Year Experience Seminar | 1 | |
| | | **TOTAL CREDITS** | **13** | |
| **Semester 2** | ENC 1102 (W) | English Composition 2 | 3 | Prerequisite: ENC 1101 |
| | *Social Sciences* | AMH 2010, AMH 2020, POS 2041 | 3 | |
| | *Computer Competency* | Computer Skills Placement (CSP)<br>---*or*---<br>CGS 1060C | | **Departmental Recommendation**: Computer Skills Placement (CSP) |
| | CHM 1045 | General Chemistry and Qualitative Analysis | 3 | Prerequisite: CHM 1025 or a passing score on the CART exam, MAC 1105<br>Corequisite: CHM 1045L |
| | CHM 1045L | General Chemistry and Qualitative Analysis Lab | 2 | Prerequisite: CHM 1025 or passing score on CART exam, MAC 1105<br>Corequisite: CHM 1045 |
| | MAC 1140 (C) | Pre-Calculus Algebra | 3 | Prerequisite: MAC 1105 |
| | | **TOTAL CREDITS** | **14** | |
| **Semester 3** | MAC 1114 (C) | Trigonometry | 3 | Prerequisite: MAC 1105 or MAC 1106 |
| | | **TOTAL SUMMER CREDITS** | **3** | |
| **Semester 4** | MAC 2311 (C) | Calculus and Analytical Geometry 1 | 5 | Prerequisites: MAC 1106 and MAC 1114, or MAC 1140 and MAC 1114, or MAC 1147 |
| | *Social Sciences* | AMH 2010, AMH 2020, ANT 2000, DEP 2000, ECO 2013 (W), POS 2041, PSY 2012, SYG 2000, WOH 2012, WOH 2022 | 3 | **Note:** Check with an MDC advisor for requisite information. |
| | *Oral Communication* | ENC 2300 (W), SPC 1017 (W), SPC 2608 (W) | 3 | Prerequisite for ENC 2300: ENC 1101, ENC 1102<br>Prerequisite for SPC 2608: ENC 0025 |
| | PHY 1025 | Basic Physics | 3 | Prerequisite: MAC 1105 |
| | | **TOTAL CREDITS** | **14** | |
| **Semester 5** | *Humanities* | ARC 2701, ARC 2702 (W), ARH 1000, ARH 2050, ARH 2051 (W), ARH 2740 (W), DAN 2100, DAN 2130 (W), HUM 1020, LIT 2000 (W), LIT 2120 (W), MUH 2111, MUH 2112 (W), MUL 1010, MUL | 3 | **Note:** Check with an MDC advisor for requisite information. |

**Notes:** W = Writing Intensive Course
C = Computational Course

| | | 2380 (W), PHI 2010 (W), PHI 2600 (W), THE 2000 (W) | | |
|---|---|---|---|---|
| | MAC 2312 (C) | Calculus and Analytical Geometry 2 | 4 | Prerequisite: MAC 2311 |
| | PHY 2048 | Physics with Calculus 1 | 4 | Prerequisites: High school physics or PHY 1025, PHY 2053 or departmental approval and MAC 2311<br>Corequisite: PHY 2048L |
| | PHY 2048L | Physics with Calculus 1 Lab | 1 | Prerequisites: MAC 2311 and High School Physics or PHY 1025 or PHY 2053 and PHY 2053L or Departmental Approval<br>Corequisite: PHY 2048 |
| | | **TOTAL CREDITS** | **12** | |
| **Semester 6** | MAC 2313 (C) | Calculus and Analytical Geometry 3 | 4 | Prerequisite: MAC 2312 |
| | | **TOTAL CREDITS** | **4** | |
| | | **PROGRAM TOTAL** | **60** | |

# Miami Dade College

| AA Course Sequence Guide - Part-Time Enrollment<br>Computer Engineering Pathway<br>Associate in Arts Degree \| Code: (10705) \| 60 Credits<br>Effective Term: Fall 2025 (2257) | | | | |
|---|---|---|---|---|
| **SEMESTER** | **Course ID** | **Course Title** | **Credits** | **Pre/Co-Requisites** |
| **Semester 1** | ENC 1101 (W) | English Composition 1 | 3 | Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption). |
| | EGN 1008C | Introduction to Engineering | 3 | |
| | MAC 1105 (C) | College Algebra | 3 | Prerequisite: MAT 1033♦<br>♦Students must seek advisement for proper mathematics course from discipline chairperson. |
| | | **TOTAL CREDITS** | **9** | |
| **Semester 2** | MAC 1140 (C) | Pre-Calculus Algebra | 3 | Prerequisite: MAC 1105 |
| | CHM 1045 | General Chemistry and Qualitative Analysis | 3 | Prerequisite: CHM 1025 or a passing score on the CART exam, MAC 1105<br>Corequisite: CHM 1045L |
| | CHM 1045L | General Chemistry and Qualitative Analysis Lab | 2 | Prerequisite: CHM 1025 or passing score on CART exam, MAC 1105<br>Corequisite: CHM 1045 |
| | *Computer Competency* | Computer Skills Placement (CSP)<br>---*or*---<br>CGS 1060C | | **Departmental Recommendation**: Computer Skills Placement (CSP) |
| | SLS 1106 | First Year Experience Seminar | 1 | |
| | | **TOTAL CREDITS** | **9** | |
| **Semester 3** | ENC 1102 (W) | English Composition 2 | 3 | Prerequisite: ENC 1101 |
| | *Social Sciences* | AMH 2010, AMH 2020, POS 2041 | 3 | |
| | MAC 1114 (C) | Trigonometry | 3 | Prerequisite: MAC 1105 or MAC 1106 |
| | | **TOTAL SUMMER CREDITS** | **9** | |
| **Semester 4** | MAC 2311 (C) | Calculus and Analytical Geometry 1 | 5 | Prerequisites: MAC 1106 and MAC 1114, or MAC 1140 and MAC 1114, or MAC 1147 |
| | *Humanities* | ARH 1000, HUM 1020, LIT 2000 (W), MUL 1010, PHI 2010 (W), THE 2000 (W) | 3 | Prerequisite for LIT 2000: ENC 1101 |
| | | **TOTAL CREDITS** | **8** | |
| **Semester 5** | MAC 2312 (C) | Calculus and Analytical Geometry 2 | 4 | Prerequisite: MAC 2311 |
| | *Oral Communication* | ENC 2300 (W), SPC 1017 (W), SPC 2608 (W) | 3 | Prerequisite for ENC 2300: ENC 1101, ENC 1102<br>Prerequisite for SPC 2608: ENC 0025 |
| | PHY 1025 | Basic Physics | 3 | Prerequisite: MAC 1105 |
| | | **TOTAL CREDITS** | **10** | |
| **Semester 6** | *Humanities* | ARC 2701, ARC 2702 (W), ARH 1000, ARH 2050, ARH 2051 (W), ARH 2740 (W), DAN 2100, DAN 2130 (W), HUM 1020, LIT 2000 (W), LIT 2120 (W), MUH 2111, MUH 2112 (W), MUL 1010, MUL | 3 | **Note:** Check with an MDC advisor for requisite information. |

**Notes:** W = Writing Intensive Course
C = Computational Course

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|---|---|---|---|---|
| | | 2380 (W), PHI 2010 (W), PHI 2600 (W), THE 2000 (W) | | |
| | *Social Sciences* | AMH 2010, AMH 2020, ANT 2000, DEP 2000, ECO 2013 (W), POS 2041, PSY 2012, SYG 2000, WOH 2012, WOH 2022 | 3 | **Note:** Check with an MDC advisor for requisite information. |
| | | **TOTAL SUMMER CREDITS** | **6** | |
| **Semester 7** | MAC 2313 (C) | Calculus and Analytical Geometry 3 | 4 | Prerequisite: MAC 2312 |
| | PHY 2048 | Physics with Calculus 1 | 4 | Prerequisites: High school physics or PHY 1025, PHY 2053 or departmental approval and MAC 2311<br>Corequisite: PHY 2048L |
| | PHY 2048L | Physics with Calculus 1 Lab | 1 | Prerequisites: MAC 2311 and High School Physics or PHY 1025 or PHY 2053 and PHY 2053L or Departmental Approval<br>Corequisite: PHY 2048 |
| | | **TOTAL CREDITS** | **9** | |
| | | **PROGRAM TOTAL** | **60** | |

**Please Note**: Students are strongly encouraged to select required lower division electives that will enhance their general education coursework and that will support their intended baccalaureate degree program. Students should consult with an academic advisor in their major degree area.

| ADDITIONAL COMMON PREREQUISITES | | | |
|---|---|---|---|
| **Course ID** | **Course Title** | **Credits** | **Pre/Corequisites** |
| MAP 2302 (C) | Differential Equations | 3 | Prerequisite: MAC 2312 |
| PHY 2049 | Physics with Calculus 2 | 4 | Prerequisite: PHY 2048 and PHY 2048L<br>Corequisites: PHY 2049L and MAC 2312 |
| PHY 2049L | Physics with Calculus 2 Lab | 1 | Prerequisite: PHY 2048 and PHY 2048L<br>Corequisites: PHY 2049 and MAC 2312. |
| COP 2270 | "C" for Engineers | 4 | Pre/Corequisite: MAC 1105. Recommended Preparation: CGS 1060C or knowledge of computer skills<br>**Note:** Course is not among the FL Common Prerequisites Manual, but it is recommended. FIU requires it and awards credit for the course. Computer Engineering majors only, may alternatively take COP 1334. |
| MAD 2104 (C) | Discrete Mathematics | 3 | Prerequisite: MAC 1106 or MAC 1140.<br>**Note:** Course is not among the FL Common Prerequisites Manual, but it is required by FIU. They award credit for Computer Engineering majors. |

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