

MECHANICAL ENGINEERING MITRANSFER PATHWAY

BACHELOR'S DEGREE PROGRAM INFORMATION

| Institution | Andrews University |
|------------------|---|
| Degree/Program | BSE Engineering, Mechanical Engineering Concentration |
| Credits Required | 135 for bachelor's; 63 in major |

MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. More information about the MTA is available at www.mitransfer.org.

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Mechanical Engineering MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

MITRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

| Pathway Course | Subject/ Course Number | Course Title | Credit Hrs |
|---|---------------------------------|---|------------|
| Calculus I | MATH 191 | Calculus I | 4 |
| Calculus II | MATH 192 | Calculus II | 4 |
| Calculus III | MATH 240 | Calculus III | 4 |
| Differential Equations* | MATH 286 | Differential Equations | 3 |
| Physics I (Calculus-based, w/lab) | PHYS 241, 271 (lab) | Physics for Scientists & Engineers I & Lab | 5 |
| Physics II (Calculus-based, w/lab) | PHYS 242, 272 (lab) | Physics for Scientists & Engineers II & Lab | 5 |
| Chemistry 1 (w/lab) | CHEM 131 | General Chemistry | 4 |
| Statics | ENGR 185 | Engineering Statics | 3 |
| Dynamics | ENGR 285 | Engineering Dynamics | 3 |
| Mechanics of Solids/Strength of Materials (no lab required) | ENGR 340 | Mechanics of Materials | 3 |
| *Minimum 4 credits, linear algebro | a must be covered (See below, M | ATH 215) | • |

REMAINING DEGREE REQUIREMENTS

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution. Specifically, universities should include courses like Introduction to Engineering, and additional Linear Algebra courses as applicable.

| General Education or Program Requirement | Subject/ Course Number | Course Title | Credit Hrs |
|--|------------------------|--------------------------|------------|
| Program Cognate | CPTR 151 | Computer Science | 3 |
| Program Cognate | MATH 215 | Intro to Linear Algebra | 3 |
| Program Cognate | STAT 340 | Probability & Statistics | 3 |
| GE Writing Course | ENGL 220 | Technical Writing | 3 |