



Biomedical Engineering Completion Program

Students who complete an **AS degree** in Engineering University Transfer at Sinclair College may transfer into the baccalaureate Biomedical Engineering program (Traditional or Pre-Med Tracks) at Wright State University based on the following conditions. Students should verify their satisfactory academic progress (SAP) requirements with the financial aid office before pursuing classes outside of their AS.

Students who wish to pursue the **Pre-Med** track are encouraged to take the following additional courses while at Sinclair College that will meet the department required courses at Wright State.

BIO 1171, CHE 2111, and CHE 2121

Admission Requirements to the Biomedical Engineering Program at Wright State

1. Cumulative GPA of 2.25
2. Grade "C" or better in, ENG 1101, EGR 1101, and CHE 1211/1251 or PHY 2201/2207

Additional Information

Students are strongly advised to complete the following Wright State courses through the SOCHE cross-registration program while attending Sinclair:

1. EGR 3350, Technical Communications for Engineers and Computer Scientists

This agreement will expire two years from date of signature.

Thomas Sudkamp 3/9/14

Dr. Thomas Sudkamp Date
Provost and Vice President for Curriculum
and Instruction
Wright State University

David L. Collins 3/21/16

Dr. David L. Collins Date
Provost
Sinclair College

Sinclair Community College

to

Wright State University – Biomedical Engineering

Sinclair Course	Credit Hours	Wright State Course/Requirement
ENG 1101 English Composition I	3	ENG 1100
COM 2211 Effective Public Speaking	3	COM 1010 (OTM course used as Global Traditions substitution)
OTM Arts & Humanities	6	Arts/Humanities Core and History Core
OTM Social & Behavioral Science	6	Social and Behavioral Science Core
CHE 1211/1251 General Chemistry I	5	CHM 1210/1210L
PHY 2201/2207 General Physics I	5	PHY 2400/2400L General Physics I
PHY 2202/2208 General Physics II	5	PHY 2410/2410L General Physics II
MAT 2270 Calculus & Analytic Geometry I	5	MTH 2300 Calculus I
MAT 2280 Calculus & Analytic Geometry II	5	MTH 2310 Calculus II
MAT 2230 Diff. Equations & Linear Algebra	5	MTH 2350 Diff. Equations with Matrix Algebra
Engineering Electives – 12 hours		
EGR 1101 Intro Math for Engineering App	4	EGR 1010 Intro Math for Engineering Apps
CHE 1221 General Chemistry II	5	CHM 1220/1220L General Chemistry
Electives Chosen in consultation with Sinclair advisor; not required at Wright State	3	
TOTAL: 60		

By completing the associate degree and the Ohio Transfer Module at Sinclair, students will have met the requirements for the Wright State Core. However, students will still need to complete any remaining courses required by the department within the Wright State Core. Students must also complete at least two designated Integrated Writing courses in the major at Wright State.

The following additional coursework will be required to complete the Biomedical Engineering Traditional program at Wright State University.

Course Number and Title	Credit Hours
EGR 3350 Technical Communication for Engineers and Computer Scientists	3
BME 1110 Fundamentals of BIE Engineering	3
BME 3211 Human Biomechanics I	4
BME 3212 Human Biomechanics II	3
BME 3511 Bioelectronics I	4
BME 3512 Bioelectronics II	4
BME 3530 Biomedical Signals and Systems	3
BME 3540 Introduction to Computation	3
BME 4410 Biothermodynamics	3
ISE 2111 Statistics for Engineers	3
BME 4550 Bioinstrumentation	4
BME 4701 Medical Imaging	4
Senior Design – Select Two Courses	6
ANT 3100 Human Structure and Function I	4
ANT 3120 Human Structure and Function II	4
Approved electives	9
Total	64

The following additional coursework will be required to complete the Biomedical Engineering Pre-med program at Wright State University. Sinclair equivalents are identified for students wishing to complete additional hours beyond the AS in Engineering University Transfer before transferring to Wright State.

Course Number and Title	Credit Hours
EGR 3350 Technical Communication for Engineers and Computer Scientists	3
BME 3211 Human Biomechanics I	4
BME 3212 Human Biomechanics II	3
BME 3511 Bioelectronics I	4
BME 3512 Bioelectronics II	4
BME 3530 Biomedical Signals and Systems	3
BME 3540 Introduction to Computation	3
BME 4410 Biothermodynamics	3
BME 4421 Biotransport	3

ISE 2111 Statistics for Engineers	3
BME 4550 Bioinstrumentation	4
BME 4701 Medical Imaging	4
Senior Design – Select Two Courses	6
ANT 3100 Human Structure and Function I	4
ANT 3120 Human Structure and Function II	4
BIO 1120 Cells and Genes (<i>Sinclair's BIO 1171</i>)	4
CHM 2110/2110L Organic Chemistry I (<i>Sinclair's CHE 2111</i>)	5
CHM 2120/2120L Organic Chemistry II (<i>Sinclair's CHE 2121</i>)	5
BMB 3220 Biochemistry for Pre-Medical Students	3
Technical Electives (Select two courses)	6
Total	78