



**Columbus State Community College
Associate of Science (AS) Degree,
to Wright State University
Bachelor of Science (BS) Degree,
Major: Biomedical Engineering
Sample Graduation Plan**



Freshman Year (CSCC)

Autumn Semester		Spring Semester	
ENGL 1100 Composition I**	(3)	MATH 1152 or 1172 (choose one)	(5)
MATH 1151 Calculus I**	(5)	PHYS 1251 Calculus Based Physics II	(5)
PHYS 1250 Calculus Based Physics I**	(5)	HIST 1111 or 1112 (choose one)	(3)
COLS 1100 First Year Experience	(1)	Intermediate Composition*	(3)
	(14)		(16)

Sophomore Year (CSCC)

Autumn Semester		Spring Semester	
Literature/Cultures & Ideas/Visual & Perf. Arts*	(3)	STAT 2470 Intro to Prob. & Stats. Engr. & Sci.	(4)
CHEM 1171 General Chemistry I	(5)	CHEM 1172 General Chemistry II	(5)
PSY 1100 Intro to Psychology	(3)	BIO 1122 Anatomy & Physiology II	(4)
BIO 1121 Anatomy & Physiology I	(4)	Social Science*	(3)
	(15)		(16)

*Course options to fulfill this requirement are listed on the last 2 pages of this document. **A grade of C or higher is needed

Summer (Wright)

CS 1160 Introduction to Computer Programming	(4)
	(4)

Junior Year (Wright)

Autumn Semester		Spring Semester	
BME 4440 Biomaterials	(4)	MATH 2350 Diff. Equations w/Matrix Algebra	(4)
EE 2010 Analog Circuit Theory	(3)	EE 3310 Electronic Devices & Circuits	(3)
EE 2010L Analog Circuitry Theory Lab	(1)	EE 3310L Electronic Devices & Circuits Lab	(1)
ME 2120 Statics	(3)	EE 3510 Continuous & Discrete Linear Systems	(3)
EGR 3350 or ENGL 2140 (choose one)	(3)	ME 3120 Mechanics of Materials	(3)
		CS 3840 or IS 3540 (choose one)	(3)
	(14)		(17)

Senior Year (Wright)

Autumn Semester		Spring Semester	
BME 4470 Design of Medical Devices	(3)	BME 4421 Biotransport	(3)
BME 4550 Bioinstrumentation	(4)	BME Technical Elective	(3)
BME 4910 Biomedical Engineering I	(3)	BME Technical Elective	(3)
ISE 4310 Ergonomics	(3)	BME Technical Elective	(3)
		BME 4920 Biomedical Engineering Design II	(3)
	(13)		(15)

- **CSCC General Education Requirements:** Students should choose the General Education courses for the AS degree in consultation with their academic and faculty advisors
- **CSCC Degree Plan:** This Sample Graduation Plan was created using the general plan of study for the Columbus State Associate of Science degree. Students who are following a specific transfer pathway at Columbus State may utilize this plan for the purposes of transfer and degree planning but should note that additional course work may be necessary to complete a Columbus State Associate of Science transfer pathway beyond what is required for the Bachelor of Science,

Biomedical Engineering major at Wright State. Additional course work completed as part of a Columbus State's transfer pathway may be applied as electives or where appropriate, course work toward the major/minor at Wright University.

- **Wright State General Education Requirements:** How a student completes these requirements will vary, depending on how he or she chose to complete the General Education requirements at Columbus State. Any General Education requirements not completed at Columbus State will need to be completed at Wright State. Students should consult with an academic advisor in the department of the intended major to discuss optimal course selections for General Education effective choice of electives, and appropriate course selections in the major. Students can find more information about their academic advisor at Wright by contacting the Transfer Center at transfer@wright.edu.
- Wright State requires at least 124 semester credit hours to complete the Bachelor of Science degree, Biomedical Engineering major and an overall GPA of 2.25 or higher.
- ****Biomedical Engineering Notes:** Students must complete CHEM 1171, ENGL 1100, and PHYS 1250 with a grade of "C" or higher at CSCC for entry into the major at Wright State. Students must complete CHEM 1172, PHYS 1251; BIO 1121 and 1122; and STAT 2470 at CSCC for the major and to progress to the required courses at Wright State **Students should apply one semester prior to completing their CSCC degree to Wright State University (priority application deadlines: April 1 for Fall; October 15 for Spring; and February 1 for summer).** Students must have an overall GPA of 2.0 to apply as pre-biomedical engineering majors. Once accepted, students must earn an 2.25 overall GPA at Wright State to be fully admitted into the major. To progress through the major in two years full-time at Wright State, students should complete the CS 1160 course at Wright State to take other courses in the major.

Suggested Courses to Complete for Wright State's General Education Requirement and Requirements for the Associate of Science Degree at Columbus State

Intermediate Composition

For the AS degree, students must complete one course from ENGL 2367, 2467, 2567, 2667, or 2767. ENGL 2767 is recommended.

Historical Study

For the AS degree, students must complete one Historical Study course. Wright State requires completion of HIST 1111 or 1112.

Social Science

For the AS degree, two social science courses are required from two different departments listed on the AS plan of study. Wright State requires completion of PSY 1100 and the second course should be chosen from a department other than PSY.

Literature/Cultures & Ideas/Visual & Performing Arts

For the AS degree, students must complete one course from Literature/Cultures & Ideas/Visual and Performing Arts. Any course listed in these categories from the AS plan of study.

Natural Sciences

For the AS degree, at least two natural science courses with labs must be completed. Wright State requires PHYS 1250, 1251; CHEM 1171, 1172 for their major and this will complete the requirement for the AS degree.