



DUAL-DEGREE ENGINEERING PROGRAM GUIDE

UNIVERSITY OF MONTEVALLO

UNIVERSITY OF ALABAMA AT BIRMINGHAM

Students pursuing the Dual-Degree Engineering Program with the University of Alabama at Birmingham (UAB) will complete approximately three academic years at the University of Montevallo (UM) and a minimum of 75% of the total hours required by UM for the awarding of the bachelor's degree, which includes all of UM's general education requirements and all course requirements of the B.S. degree in mathematics. The Student pursuing the Dual-Degree may be jointly enrolled at both institutions. After successful completion of those requirements, the student transfers to UAB School of Engineering to pursue one of the following degree programs:

Biomedical Engineering
Civil Engineering
Electrical Engineering

Materials Engineering
Mechanical Engineering

In order for a student to become a Dual-Degree candidate at UAB, he or she must have a recommendation from the designated official at UM and satisfied the admission requirements for the School of Engineering at UAB. The student should review his or her intended engineering curriculum model in the UAB catalog, and is strongly encouraged to contact UAB School of Engineering Office of Academic Programs prior to applying for admission so that an advising plan can be created to assist the student in transferring credits from UM in order to complete degree requirements for the Engineering program. The Dual-Degree student will be required to complete a UAB study program which includes all the remaining course work in the standard curriculum for the particular degree being sought.

After completing all academic requirements of the two cooperating institutions, the Dual-Degree student will be awarded a Bachelor of Science degree in mathematics from UM and one of the several designated bachelor degrees awarded by UAB.

UM students interested in the Dual-Degree program should contact Dr. Kevin Hope, Assistant Professor of Physics, for details.

HELPFUL LINKS AND INFORMATION

Dr. Kevin Hope, Assistant Professor of Physics, UM - hopekm@montevallo.edu or 205 665-6480

UM Registrar's Office - www.legacy.montevallo.edu/registrar or 205 665-6040

UAB School of Engineering Office of Academic Programs - engingo@uab.edu or 205 934-8400

UM transfer course equivalencies:

<http://www.montevallo.edu/about-um/administration/registrar/transfer-equivalencies/>

UAB transfer course equivalencies:

www.uab.edu/students/academics/item/765-transfer-equivalency-courses

GENERAL EDUCATION / CORE CURRICULUM REQUIREMENTS

All students who participate in the Dual-Degree Program must complete the General Education/Core Curriculum requirements for both UM and UAB. The courses must be taken at UM and will transfer to UAB to fulfill the Core Curriculum requirements for the School of Engineering. **NOTE: Only grades of C or higher will satisfy UAB degree requirements.**

UAB CORE REQUIREMENT	UM RECOMMENDED COURSE	UAB EQUIVALENT
Written Composition (6 hours)		
	ENG 101/103 Composition I	EH 101 English Composition I
	ENG 102/104 Composition II	EH 102 English Composition II
Humanities, Literature, & Fine Arts (9 hours)		
Literature - Choose at least 1 (Must complete either the LIT or HIST sequence)	ENG 231/233 Global Literature	EH 217 World Lit I: Before 1660
	ENG 232/234 Global Literature	EH 218 World Literature II: 1660-Pres
Humanities	COMS 101 Foundations of Oral Comm	CM 101 Public Speaking
Fine Arts - Choose 1	ART 100 Art Awareness	ARH 101 The Art Experience
	ART 218 History of Art I	ARH 203 Ancient and Medieval Art
	ART 219 History of Art II	ARH 253 Renaissance through Modern
	MUS 121/122 Invitation to Listening	MU 120 Music Appreciation
	THEA 120/122 Intro to Theatre	TH 100 Intro to Theatre
History, Social & Behavioral Sciences (9 hours)		
History - Choose at least 1 (Must complete either the LIT or HIST sequence)	HIST 101/103 History of World Civ I	HY 101 Western Civ to 1648
	HIST 102/104 History of World Civ II	HY 102 Western Civ Since 1648
Social & Behavioral Sciences - Choose at least 1 (If completing the sequence in Literature, two classes from this group should be taken)	EC 231 Intro to Microeconomics	EC 211 Principles of Macroeconomics
	EC 232 Intro to Microeconomics	EC 210 Principles of Microeconomics
	PSYC 201 Foundations in Psychology	PY 101 Intro to Psychology
	SOC 101 Introductory Sociology	SOC 101 Intro to Sociology
Natural Sciences & Mathematics (12 hours)		
Mathematics	MATH 170 Calculus I	MA 125 Calculus I
Natural Sciences*	PHYS 241 University Physics I	PH 221 General Physics I
	PHYS 242 University Physics II	PH 222 General Physics II

*UM students must take an additional science class in a discipline other than Physics in order to fulfill the General Education requirements for the B.S. degree in Mathematics. Refer to the *Mathematics and Science Courses* table below for more information.

ADDITIONAL CURRICULUM REQUIREMENTS

If the official study program at UAB for the Dual-Degree candidate includes a free elective and the candidate has excessive hours of credit at UM, these excess hours will be used as free elective transfer credit at UAB.

The School of Engineering Office of Academic Programs at UAB is to be contacted concerning descriptions of course prerequisites and minimum course content. The number of course credits in the specified areas of the General Education Requirements must be included in the three-year study program taken at UM. Other courses in math, engineering, statistics, etc, will be considered for UAB degree credit.

MATHEMATICS AND SCIENCE COURSES

The chart below lists courses in Mathematics, Chemistry, and Physics that may be taken at UM to transfer to UAB to meet additional Engineering degree requirements. Dual-Degree students are strongly encouraged to contact UAB School of Engineering for questions concerning the requirements needed for the desired program. The courses listed below are by no means exhaustive. **NOTE: Only grades of C or higher will satisfy UAB degree requirements.**

UM COURSE(S)	UAB EQUIVALENT	REQUIRED BY
Mathematics		
MATH 170 Calculus I	MA 125 Calculus I	All Engineering programs
MATH 171 Calculus II	MA 126 Calculus II	All Engineering programs
MATH 272 Calculus III	MA 227 Calculus III	All Engineering programs
MATH 350 Differential Equations (Option 2)	MA 252 Intro to Differential Equations	All Engineering programs
MATH 390 Linear Algebra	MA 260 Intro to Linear Algebra	Biomedical (Required), Materials (2)* (as required math/science elective)
Biology		
BIO 105 Intro Biology I	BY 123 Intro Biology I	Biomedical (required) Materials(2)*, Mechanical(1)* (as required math/science elective)
BIO 206 Genetics	BY 210 Genetics	Biomedical (required) Materials(2)*, Mechanical(1)* (as required math/science elective)
Chemistry		
CHEM 121 General Chemistry I	CH 115/116 General Chemistry I / Lab	All Engineering programs
CHEM 122 General Chemistry II	CH 117/118 General Chemistry II / Lab	Biomedical, Civil, Electrical, Mechanical
CHEM 221 Organic Chemistry I	CH 235/236 Organic Chemistry I / Lab	Biomedical(2)*, Materials(2)*, Mechanical(1)* (as require math/science elective)
CHEM 222 Organic Chemistry II	CH 237/238 Organic Chemistry II / Lab	Biomedical(2)*, Materials(2)*, Mechanical(1)* (as required math/science elective)
Physics		
PHYS 241 University Physics I	PH 221 General Physics I	All Engineering programs
PHYS 242 University Physics II	PH 222 General Physics II	All Engineering programs
PHYS 350 Modern Physics	PH 351 Modern Physics I	Biomedical(2)*, Materials(2)*, Mechanical(1)* (as require math/science elective)

*The number in parenthesis indicates the number of math/science electives allowed in the program.