



Program Map Engineering

Degree: Associate of Science (AS) in Engineering



SCIENCE, ENGINEERING & MATH

Program Description: The Associate of Science in Engineering is intended to match closely the curriculum of the first two years of study in most university engineering programs.

Contact:

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Department Website

www.austincc.edu/engineering

Use this **Program MAP** as an advising guide to choose courses with your advisor and track progress towards milestones and completion of program.

Pre-Degree Requirements		
Program Specific	Reading and Writing Placement <i>Placements based on TSI</i>	Mathematics Placement <i>Placements based on TSI</i>
Prerequisites for Calculus I: <input type="checkbox"/> MATH 1314 – College Algebra <input type="checkbox"/> MATH 1316 – Trigonometry <input type="checkbox"/> MATH 2412 – Precalculus: Functions and Graphs	<input type="checkbox"/> Basic Developmental Courses <input type="checkbox"/> ESOL Courses <input type="checkbox"/> INRW Courses	<input type="checkbox"/> MATD-0332 - Basic Math Skills <input type="checkbox"/> MATD-042x/032x – ALEKS Sequence <input type="checkbox"/> MATD-0385/0485 – Developing Mathematical Thinking <i>Not prerequisite for MATH-1314/1324</i> <input type="checkbox"/> MATD-0370 – Elementary Algebra <input type="checkbox"/> MATD-0390 – Intermediate Algebra <i>Take MATD-0370 and 0390 to prepare for MATH-1314/1324</i>
SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS		
<i>Plans can be modified to fit the needs of part-time students by adding more semesters</i>		

Semester 1	CR	Advising Notes
EDUC 1300 – Effective Learning: Strategies for College Success	3	All first time Austin Community College (ACC) students with fewer than 12 SCH of successful college credit must take EDUC 1300 in their first semester at ACC. All other students may select either EDUC 1300 or a SPCH course from the Component Area Option List of courses in the Core Curriculum Course List. See an advisor or a full-time faculty member in Engineering for more information.
MATH 2413 – Calculus I	3	Students should consult with a full-time mathematics instructor since one or more mathematics courses may be required before enrolling in MATH 2413.
ENGL 1301 – English Composition I	3	
ENGR 1201 – Introduction to Engineering	3	
CHEM 1311 – General Chemistry I - Lecture	3	
CHEM 1111 – General Chemistry I - Lab	1	
	16	Program Semester Hours / Meet with your advisor
Semester 2		
MATH 2414 – Calculus II	4	
PHYS 2425 - Engineering Physics I	4	Students lacking one full year of (recent) high school physics should take PHYS 1401 before taking PHYS 2425. All students must complete MATH 2413 before enrolling in PHYS 2425.
ENGL 1302 - English Composition II	3	
HIST 1301 - United States History I	3	May also select from the following courses: HIST 2301, HIST 2327, or HIST 2381. HIST 2301 and HIST 2381 may only be taken once.

ARTS 1303 – Art History I	3	Or choose a course from the Creative Arts section of the Core Curriculum Course List. Check with prospective transfer institutions for transferability.
	17	Program Semester Hours / Meet with your advisor
Semester 3		
ENGL 2332 – World Literature: Ancient World through 17th Century	4	Or choose a course from the Language, Philosophy, and Culture section of the Core Curriculum Course List. Check with prospective transfer institutions for transferability.
PHYS 2426 - Engineering Physics II	4	Credit for PHYS 2425 and credit for MATH 2414 are strictly required prerequisites for PHYS 2426.
MATH 2415 – Calculus III	3	MATH 2420 is no longer required for the degree; however, it is strongly recommended.
GOVT 2305 – United States Government	3	
	14	Program Semester Hours / Meet with your advisor
Semester 4		
HIST 1302 – United States History II	3	May also select from the following courses: HIST 2301, HIST 2327, or HIST 2381. HIST 2301 and HIST 2381 may only be taken once.
PHIL 2306 – Ethics	3	Or choose a course from the Component Area Option section of the Core Curriculum Course List. Check with prospective transfer institutions for transferability.
ECON 2301 – Principles of Macroeconomics	3	Or choose a course from the Social and Behavioral section of the Core Curriculum Course List. Check with prospective transfer institutions for transferability.
GOVT 2306 – Texas State and Local Government	3	
Restricted Elective	1-4	Select course that best matches the degree requirements at the four-year engineering school of your choice from the following rubrics: BIOL, CHEM, COSC, DFTG, ENGR, KINE, MATH.
		ACHIEVEMENT: Completion of Associate of Science degree
	13-16	Program Semester Hours
Total Program Hours 60 – 63		

Transfer Information

This AS degree provides a pathway to transfer to a four-year college or university where students can earn a baccalaureate degree. Students are strongly encouraged to select a transfer destination by the time they have completed 30 semester credit hours. Students should consult with their chosen transfer institution regarding recommended courses that will transfer and be applied to their baccalaureate degree program.

For more information on program transfer information to four year institutions visit ACC's transfer information for colleges & universities:

<http://www.austincc.edu/degrees-and-certificates/earn-a-degree-and-transfer/prepare-for-transfer/information-sheets>

Career Information

The data below are intended to be a guide and reference tool and represent local and regional employment information for occupations related to this program. This is not a guarantee of job placement in any of these occupations after successful completion of an ACC program.

<http://www.achievetexas.org/> - Texas Workforce Commission, Texas Education Agency Achieve Texas

<http://www.bls.gov/ooh/> - Bureau of Labor Statistics

<https://www.onetonline.org/> - US Department of Labor