

**Sample 5-year plan for Freshman Students who need Math 1040 for Calculus¹
for the Bachelor of Science Degree in Electrical Engineering (Total: 128 Units)**

	Fall _____	Spring _____	Total
Year 1	MATH 1040 – PreCalculus: Functions and Trigonometry (6) COMM 1100 (3) – Oral Comm. ENGR 1500 (3) – Intro to Engr./Tech TOTAL: (12)	MATH 2110 (4) – Calculus I EE 2440 (3) – Digital Engineering ENGL 1010 (3) – Accelerated College Writing US History (3) TOTAL: (13)	25
Year 2	MATH 2120 (4) – Calculus II EE 2450 (3) – Embedded programming I EE 2449 (1) – Digital Logic Lab PHYS 2100 (5) – General Physics I ENGL 2030 (3) – Intro to Tech Writing TOTAL: (13)	CHEM 1040 (4) – General Chemistry for Engineers MATH 2130 (3) – Calculus III PHYS 2200 (5) – General Physics II EE 2040 (3)* -- Circuit Analysis I TOTAL: (15)	31
Year 3	MATH 2150 (3) – Diff. Equation EE 3020 (3)* -- Signals and Systems EE 3450 (3) – Embedded Sys. Programming II EE 3001 (1) - Numerical Analysis and Modeling Using MATLAB GE: HUMANITIES (3) TOTAL: (13)	EE 2049 (1) – Electrical Measurements and Circ Lab EE 3300 (3) – Electric Machines ENGL 2030 (3) – Intro to Tech Writing POLS 1000 (3) Government and American Society ENGR 3010 (3) – Ethics & Professionalism in Eng TOTAL: (13)	33
Year 4	EE 3040 (3) – Probability, Random Variable, and Random Processes EE 3000 (3) – Econ for Engineers EE 3810 (3) – Sensors & Instrumentation in BME GE: SOCIAL SCIENCE (3) TOTAL: (12)	EE 3600 (3) – Control Sys. I EE 3700 (3) – Electronics I EE 3200 (3) – Analog Comm. Sys. EE 3030 (3) – Circuit Analysis II TOTAL: (12)	24
Year 5	EE 4961 (3) – Senior Design I EE 3050 (3) – Electric & Magnetic Fields EE ELECTIVE (3) EE ELECTIVE (3) EE ELECTIVE LAB (1) TOTAL: (13)	EE 4962 (3) – Senior Design II EE ELECTIVE (3) EE ELECTIVE (3) EE ELECTIVE (3) TOTAL: (12)	25

¹ To be advised by ECST Student Success Center.

**Sample 5-year plan for Freshman Students who need Math 1082, Math 1083 for Calculus²
for the Bachelor of Science Degree in Electrical Engineering (Total: 130 Units)**

	Fall _____	Spring _____	Total
Year 1	MATH 1082 - PreCalculus: Functions, with Lab (4) ENGR 1500 (3) – Intro to Engr./Tech ENGL 1010 (3) – Accelerated College Writing POLS 1000 (3) Government and American Society TOTAL: (13)	MATH 1083 - Mathematical Analysis II (4) EE 2440 (3) – Digital Engineering ENGL 2030 (3) – Intro to Tech Writing GE: SOCIAL SCIENCE (3) TOTAL: (13)	26
Year 2	MATH 2110 (4) – Calculus I COMM 1100 (3) – Oral Comm. EE 2450 (3) – Embedded programming I US History (3) TOTAL: (13)	MATH 2120 (4) – Calculus II PHYS 2100 (5) – General Physics I EE 2449 (1) – Digital Logic Lab CHEM 1040 (4) – General Chemistry for Engineers TOTAL: (14)	27
Year 3	MATH 2130 (3) – Calculus III PHYS 2200 (5) – General Physics II EE 2040 (3)* -- Circuit Analysis I EE 3001 (1) - Numerical Analysis and Modeling Using MATLAB TOTAL: (12)	MATH 2150 (3) – Diff. Equation EE 2049 (1) – Electrical Measurements and Circuit Lab EE 3020 (3)* -- Signals and Systems EE 3300 (3) – Electric Machines EE 3450 (3) – Embedded Sys. Programming II TOTAL: (13)	25
Year 4	EE 3040 (3) – Probability, Random Variable, and Random Processes EE 3000 (3) – Econ for Engineers EE 3810 (3) – Sensors & Instrumentation in BME ENGR 3010 (3) – Ethics & Professionalism in Eng TOTAL: (12)	EE 3600 (3) – Control Sys. I EE 3700 (3) – Electronics I EE 3200 (3) – Analog Comm. Sys. EE 3030 (3) – Circuit Analysis II EE ELECTIVE (3) TOTAL: (15)	27
Year 5	EE 4961 (3) – Senior Design I EE 3050 (3) – Electric & Magnetic Fields EE ELECTIVE (3) EE ELECTIVE (3) EE SPECIALIZATION LAB (1) TOTAL: (13)	EE 4962 (3) – Senior Design II EE ELECTIVE (3) EE ELECTIVE (3) GE: HUMANITIES (3) TOTAL: (12)	25

Lower Division GE Requirement: Students need to select from the US History, Blocks C1, and D courses to fulfill the requirement of one race/ethnicity (re) and one diversity (d) course, or two (re) courses.

² To be advised by ECST Student Success Center.

Important EE Major Courses: Courses with * are important prerequisites to upper division required courses and students should take them as soon as possible to avoid delays in graduation. Out of the five EE Elective Lectures, at least three need to be selected from the area of specialization.