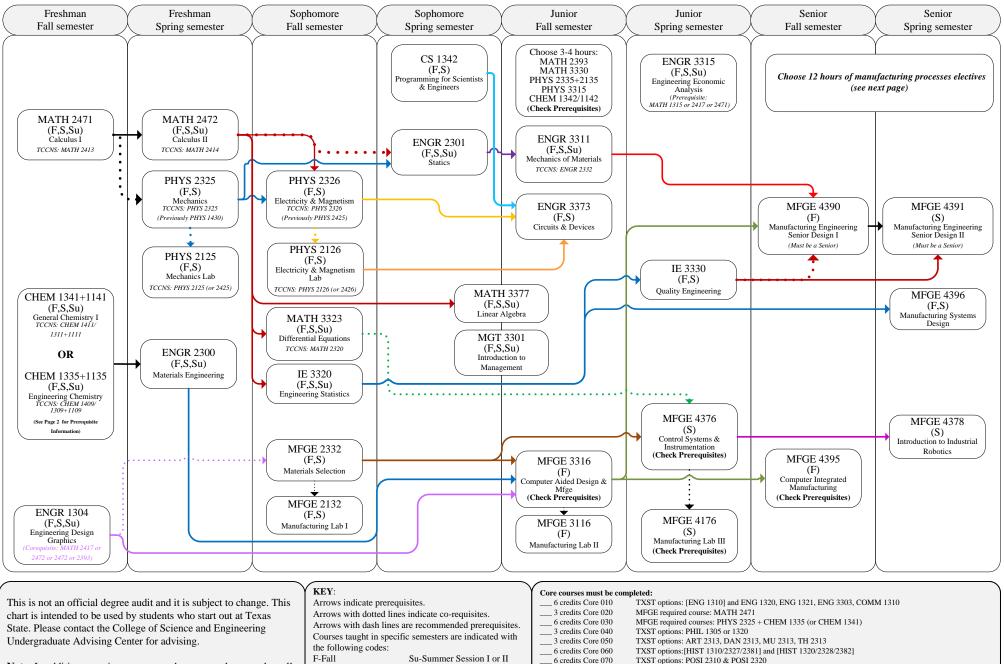
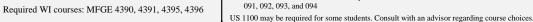
## BS – Manufacturing Engineering

## (SC-BS/MFGE)

2025 Catalog year: College of Science and Engineering



**Note:** In addition to major courses, students must also complete all core and minor requirements (if applicable) and any other requirements for graduation.



\_\_\_\_ 3 credits Core 080

\_\_\_\_ 6 credits Core 090,

MFGE required course: ECO 2301

MFGE required courses: MATH 2472 + PHYS 2326

S-Spring

Choose 12 credits MFGE Elective Options (check prerequisites):			
Smart Manufacturing focus: MFGE 4318 – Additive Manufacturing MFGE 4377 – Intro to Polymer Nanocomposites MFGE 4367 – Polymer Properties & Processing MFGE 4365 – Tool Design	Auto & Aero focus: MFGE 4318 – Additive Manufacturing MFGE 4377 – Intro to Polymer Nanocomposites MFGE 4355 – Design of Machine Elements MFGE 4357 – Dynamics of Machinery MFGE 4367 – Polymer Properties & Processing MFGE 4315 – Energy & Thermofluids Engineering MFGE 4365 – Tool Design		<b>Semiconductor Manufacturing focus:</b> MFGE 4318 – Additive Manufacturing MFGE 4315 – Energy & Thermofluids Engineering
Students may also choose a maximum of 3 credits from:			
EE 4331 – Intro to Machine Learning for Engineering Applications EE 4392 – Microelectronics Manufacturing I EE 4394 – Microelectronics Manufacturing II IE 4355 – Facilities Planning IE 3360 – Human Factors Design TECH 4330 – Foundry & Heat Treatment		ENGR 3190 – Cooperative Education ENGR 3290 – Cooperative Education ENGR 4299 – Engineering Undergraduate Research ENGR 4395 – Independent Studies in Engineering	

## CHEM 1335 or 1341 Prerequisite Requirements: Must complete 1 of the following mathematics prerequisites: MATH 1315 or MATH 1317 or MATH 1319 or MATH 1329 or MATH 2321 or MATH 2417 or MATH 2471 - any with a grade of "C" or better ACT Mathematics score of 24 or better New ACT Mathematics score of 25 or better SAT Mathematics score of 550 or better Accuplacer College Mathematics score of 86 or better Compass College Algebra score of 46 or better Next-Generation Advanced Algebra and Functions Test of 263 or better Must complete 1 of the following to demonstrate (Demistry Readiness) Completion of Chemistry Readiness Exam with a score of 80 or better Completion of Chemistry Readiness Exam with a score of 80 or better