2024-2025 and later catalogs

Student Name _____TTU ID_____ Date _____

Email Address _____ ADVISING FOR _____ (e.g., fall 2020)

Students: For courses taken at TTU, put the grade received next to the course.
For transfer credit, use T and the grade received (ex. TB).
For courses that you are currently enrolled in and expect to pass, use an R next to that course.
DO NOT EDIT THE TEXT ON THIS FORM.
Advisors: Indicate the courses to be taken in the following semester by circling the courses.

	Fall		*Spring*	
FIRST YEAR	ENGL 1301, Ess. Coll. Rhetoric	_____	ENGL 1302, Adv. Coll. Rhetoric	_____
	MATH 1451, Calc. I	_____	MATH 1452, Calc. II	_____
	CHEM 1307 &1107, Prin. of Chem. I	_____	ENGR 1320, Bio-Inspired Design	_____
	ENGR 1110, Engineering Seminar	_____	ENGR 2392, Engr. Ethics (LPC)	_____
	ENGR 1330, Comp.Thinking/Data Sc.	_____	PHYS 1408, Prin. of Phys.	_____
SECOND YEAR	*Fall*		*Spring*	
	MATH 2450, Calc. III	_____	MATH 3350, Adv. Math. for Engr. I	_____
	CHEM 1308 & 1108, Prin. Of Chem. II	_____	**CH E 3315, Fluid Mechanics***	_____
	CH E 2310, Intro. to Chem. Proc.*	_____	**CH E 2321, Chem. Eng. Thermo. I** *	_____
	PHYS 2401, Prin. of Phys. II	_____	CHEM 3305 & 3105, O-Chem I	_____
THIRD YEAR	*Fall*		*Spring (Apply for Graduation)*	_____
	CH E 2306, Expos. Tech. Info* (Oral Comm)	_____	Chemical Engineering elective	_____
	CH E 3326, Heat Transfer*	_____	**CH E 3232, Transport Lab.***	_____
	CH E 3322, Chem. Eng. Thermo. II*	_____	**CH E 3341, Mass-Trans. Oper.***	_____
	IE 2324, Engr. Econ. Analysis(Soc/Behavior)	_____	**CH E 3323, Chem. Reaction Eng.***	_____
	CH E 3330 Eng. Materials Sci.	_____	CH E 4372, Eng. Experimentation.	_____
FOURTH YEAR	*Fall*		*Spring*	
	CH E 4232, Unit Oper. Lab.*	_____	**CH E 4455, Chem. Proc. Des. & Sim.***	_____
	CH E 4353, Process Control*	_____	**CH E 4356, Process Safety***	_____
	Chemical Engineering Elective	_____	Chemical Engineering Elective	_____

Additional Requirements - Indicate the Course (ex. ART 1309) as well as the grade.

American History (6 hrs) _____ _____ Multicultural (3 hrs) _____

Political Science (6 hrs) _____ _____ Creative Arts (3 hrs)_____

Chemistry Electives (6 hrs lecture, 1 hr. lab) _____ _____ _____

18-hr rule ____ 3 engr repeats ____ 3 attempts per course ____

Foreign language – 2 yrs HS _____ or freshman-level courses _____ _____

Additional Comments:

Advisor Signature _____

Student Signature _____ Date _____

***Classes in bold print are only guaranteed to be offered in the semester in which they are listed and must be taken in sequence.**

Polymer and Materials Minor#

Minimum of six courses.

Two courses are required:

_____ CH E 4344 Polym./Mat. Lab.
_____ CH E 3330 Materials Sci.

Plus four courses chosen from the following list with two in another department:

_____ CHEM 3306 Organic Chem. II
_____ CHEM 4310 Polymer Chem.
_____ CH E 4340 Polymer Proc.
_____ CH E 4341 Polymerization Eng.
_____ CH E 4342 Polymer Physics/Eng.
_____ CH E 4345 Dyn. Polym. Nonlinear Fluids
_____ CH E 4346 Polymer Viscoelasticity
_____ CH E 4393 Colloid Science/Engr.
_____ CH E 4394 Soft Materials
_____ E E 4381 VLSI Processing
_____ M E 3228 Materials & Mechanics Lab.

#Earning of the Polymer minor is contingent on the offering of polymer electives.

Math Minor

Minimum of six courses.

Three courses are required:

_____ MATH 1451 Calc. I
_____ MATH 1452 Calc. II
_____ MATH 2450 Calc. III

One elective is required for the BS Ch E degree:

_____ MATH 3350 or 3354 Diff. Eqns. I*

Plus six hours of approved courses (the following are recommended, others may be taken - see the Math Dept. for all options); for graduate school in Ch E, MATH 3351 or 4354 is recommended:

_____ MATH 2360 Linear Algebra*
_____ MATH 3342 Math. Stat. for Eng.
_____ MATH 3351 Higher Math for Eng. II
_____ MATH 4310 Intro. Num. Anal. I
_____ MATH 4354 Diff. Eqns. II

*If Dif Eq is from community college, you must take upper-level courses for remaining 6 hours.

Bioengineering Minor

Minimum of seven courses required.

Three courses are required:

_____ BIOL 1403 Biology I (Fall)
_____ CHEM 1308/1108 Prin. Chem II (Fall or Spr)

Plus one of the following:

_____ BIOL 1404 Biology II (Spring)
_____ CHEM 3306/3106 Organic Chem. II & Lab**
_____ MBIO 3400 Microbiology

Plus one of the following core bioengineering courses:

_____ CH E 4363 Biochemical Engineering**
_____ ECE 5356 Bioinstrumentation/Biosensors

Plus two of the following (note must not include core course):

_____ CH E 4363 Biochemical Engineering(if not used as core)
_____ CH E 4364 Ch E Appl. in Biological Systems**
_____ CH E 4365 Biotransport**
_____ CH E 4366 Biomicrofluidics**
_____ CH E 4385 Bioprocess Control**
_____ CS 3368 Artificial Intelligence
_____ CS 4379 Concurrent and Parallel Programming
_____ CS 5393 Bioinformatics
_____ ECE 4367 Image Processing
_____ ECE 5351 Biomedical Signal Processing
_____ ECE 5355 Genomic Signal Processing and Control
_____ ECE 5356 Bioinstrumentation/Biosensors (if not used as core)
_____ ENV E 3309 Environmental Engineering
_____ ENV E 4385 Microbial Apps. in Envir. Engineering
_____ ENV E 4399 Bio. Municipal Wastewater Treatment
_____ IE 4301 Engineering Design for People
_____ IE 4306 Work and Product Safety Engineering
_____ MBIO 3401 Principles of Microbiology (Fall or Spring):
OR CHEM 3310 Molecular Biochemistry;
OR BIOL 3320 Cell Biology

** Denotes courses preferred for CH E Majors