

Bachelor of Science Degree

Mechanical Engineering Technology (MET) Based on 2022-2023 catalog

First Year		Second Year		Third Year		Fourth Year																								
First Semester FALL	Second Semester SPRING	Third Semester FALL	Fourth Semester SPRING	Fifth Semester FALL	Sixth Semester SPRING	Seventh Semester FALL	Eighth Semester SPRING																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">MECT 1364 3 major</td> <td style="text-align: center;">MECT 1330 3 major</td> </tr> <tr> <td style="text-align: center;">Materials & Processes I</td> <td style="text-align: center;">Engineering Graphics</td> </tr> <tr> <td style="text-align: center;">P: None</td> <td style="text-align: center;">P: Computer Knowledge</td> </tr> </table>	MECT 1364 3 major	MECT 1330 3 major	Materials & Processes I	Engineering Graphics	P: None	P: Computer Knowledge		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">MECT 2354 3 major</td> <td style="text-align: center;">MECT 3355/3155 4 major</td> </tr> <tr> <td style="text-align: center;">Introduction to Mechanics</td> <td style="text-align: center;">Strength of Materials & Lab</td> </tr> <tr> <td style="text-align: center;">P: C-in PHYS 1301/1101 & MATH 2413</td> <td style="text-align: center;">P: Min of C- in MECT 2354 & MATH 2414</td> </tr> </table>	MECT 2354 3 major	MECT 3355/3155 4 major	Introduction to Mechanics	Strength of Materials & Lab	P: C-in PHYS 1301/1101 & MATH 2413	P: Min of C- in MECT 2354 & MATH 2414		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">MECT 3358 3 major</td> <td style="text-align: center;">MECT 3365 3 major</td> </tr> <tr> <td style="text-align: center;">Dynamics of Mechanisms</td> <td style="text-align: center;">Computer-Aided Design I</td> </tr> <tr> <td style="text-align: center;">P: Min of C- in MECT 1330, 2354 & MATH 2414</td> <td style="text-align: center;">P: Min of C- in MECT 3355, 1330 & 1364 or equivalents</td> </tr> </table>	MECT 3358 3 major	MECT 3365 3 major	Dynamics of Mechanisms	Computer-Aided Design I	P: Min of C- in MECT 1330, 2354 & MATH 2414	P: Min of C- in MECT 3355, 1330 & 1364 or equivalents		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">MECT 4275 2 major</td> <td style="text-align: center;">MECT 4276 2 major</td> </tr> <tr> <td style="text-align: center;">Senior Design Project I</td> <td style="text-align: center;">Senior Design Project II</td> </tr> <tr> <td style="text-align: center;">P: C- in MECT 3358, 3342, 3365</td> <td style="text-align: center;">P: C- in MECT 4275</td> </tr> </table>	MECT 4275 2 major	MECT 4276 2 major	Senior Design Project I	Senior Design Project II	P: C- in MECT 3358, 3342, 3365	P: C- in MECT 4275
MECT 1364 3 major	MECT 1330 3 major																													
Materials & Processes I	Engineering Graphics																													
P: None	P: Computer Knowledge																													
MECT 2354 3 major	MECT 3355/3155 4 major																													
Introduction to Mechanics	Strength of Materials & Lab																													
P: C-in PHYS 1301/1101 & MATH 2413	P: Min of C- in MECT 2354 & MATH 2414																													
MECT 3358 3 major	MECT 3365 3 major																													
Dynamics of Mechanisms	Computer-Aided Design I																													
P: Min of C- in MECT 1330, 2354 & MATH 2414	P: Min of C- in MECT 3355, 1330 & 1364 or equivalents																													
MECT 4275 2 major	MECT 4276 2 major																													
Senior Design Project I	Senior Design Project II																													
P: C- in MECT 3358, 3342, 3365	P: C- in MECT 4275																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">MATH 2312 3 Math</td> <td style="text-align: center;">MATH 2413 4 MATH</td> </tr> <tr> <td style="text-align: center;">Precalculus</td> <td style="text-align: center;">Calculus I</td> </tr> <tr> <td style="text-align: center;">P: C- or better in MATH 1314 or satisfactory score on placement exam</td> <td style="text-align: center;">P: C- or better in MATH 2312 or satisfactory score on placement exam</td> </tr> </table>	MATH 2312 3 Math	MATH 2413 4 MATH	Precalculus	Calculus I	P: C- or better in MATH 1314 or satisfactory score on placement exam	P: C- or better in MATH 2312 or satisfactory score on placement exam		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">MATH 2414 4 MATH</td> <td style="text-align: center;">MECT3318/3118 4 major</td> </tr> <tr> <td style="text-align: center;">Calculus II</td> <td style="text-align: center;">Fluid Mechanic Applications & Lab</td> </tr> <tr> <td style="text-align: center;">P: C- or better in MATH 2413</td> <td style="text-align: center;">P: Min of C- MECT 2354 & MATH 2414</td> </tr> </table>	MATH 2414 4 MATH	MECT3318/3118 4 major	Calculus II	Fluid Mechanic Applications & Lab	P: C- or better in MATH 2413	P: Min of C- MECT 2354 & MATH 2414		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">MECT 3331 3 major</td> <td style="text-align: center;">MECT 3342 3 major</td> </tr> <tr> <td style="text-align: center;">Applied Thermodynamics</td> <td style="text-align: center;">Elements of Plant Design</td> </tr> <tr> <td style="text-align: center;">P: Min of C- in MATH 2413 & PHYS 1302/1102</td> <td style="text-align: center;">P: Min of C- in MECT 1330, 3318 & 3331</td> </tr> </table>	MECT 3331 3 major	MECT 3342 3 major	Applied Thermodynamics	Elements of Plant Design	P: Min of C- in MATH 2413 & PHYS 1302/1102	P: Min of C- in MECT 1330, 3318 & 3331		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">MECT 4372/4172 4 major</td> <td style="text-align: center;">MECT 4188 1 major</td> </tr> <tr> <td style="text-align: center;">Materials Technology & Lab</td> <td style="text-align: center;">Ethics in Engineering Technology</td> </tr> <tr> <td style="text-align: center;">P: Min of C- in MECT 3355 and enrolled in MECT 4172</td> <td style="text-align: center;">P: Senior status</td> </tr> </table>	MECT 4372/4172 4 major	MECT 4188 1 major	Materials Technology & Lab	Ethics in Engineering Technology	P: Min of C- in MECT 3355 and enrolled in MECT 4172	P: Senior status
MATH 2312 3 Math	MATH 2413 4 MATH																													
Precalculus	Calculus I																													
P: C- or better in MATH 1314 or satisfactory score on placement exam	P: C- or better in MATH 2312 or satisfactory score on placement exam																													
MATH 2414 4 MATH	MECT3318/3118 4 major																													
Calculus II	Fluid Mechanic Applications & Lab																													
P: C- or better in MATH 2413	P: Min of C- MECT 2354 & MATH 2414																													
MECT 3331 3 major	MECT 3342 3 major																													
Applied Thermodynamics	Elements of Plant Design																													
P: Min of C- in MATH 2413 & PHYS 1302/1102	P: Min of C- in MECT 1330, 3318 & 3331																													
MECT 4372/4172 4 major	MECT 4188 1 major																													
Materials Technology & Lab	Ethics in Engineering Technology																													
P: Min of C- in MECT 3355 and enrolled in MECT 4172	P: Senior status																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">CHEM 1305/1105 3 </td> <td style="text-align: center;">PHYS 1301/1101 4 NS</td> </tr> <tr> <td style="text-align: center;">Foundations of Chemistry I</td> <td style="text-align: center;">College Physics I & Lab</td> </tr> <tr> <td style="text-align: center;">P: enrolled or completed MATH 1314 or 1332</td> <td style="text-align: center;">P: MATH 2312 or equiv</td> </tr> </table>	CHEM 1305/1105 3	PHYS 1301/1101 4 NS	Foundations of Chemistry I	College Physics I & Lab	P: enrolled or completed MATH 1314 or 1332	P: MATH 2312 or equiv		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">PHYS 1302/1102 4 NS</td> <td style="text-align: center;">MECT 3360 3 major</td> </tr> <tr> <td style="text-align: center;">College Physics II & Lab</td> <td style="text-align: center;">Automated Manufacturing Systems</td> </tr> <tr> <td style="text-align: center;">P: PHYS 1301</td> <td style="text-align: center;">P: Min of C- in MECT 1364</td> </tr> </table>	PHYS 1302/1102 4 NS	MECT 3360 3 major	College Physics II & Lab	Automated Manufacturing Systems	P: PHYS 1301	P: Min of C- in MECT 1364		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">CORE 3 SS</td> <td style="text-align: center;">MECT 3367 3 major</td> </tr> <tr> <td style="text-align: center;">Social & Beh Sci or OR TECH 1313</td> <td style="text-align: center;">Quality Control Technology</td> </tr> <tr> <td style="text-align: center;">P: enrolled or completed MATH & ENGL core course</td> <td style="text-align: center;">P: Min of C- in MECT 1364 & MATH 2312 or equivalents</td> </tr> </table>	CORE 3 SS	MECT 3367 3 major	Social & Beh Sci or OR TECH 1313	Quality Control Technology	P: enrolled or completed MATH & ENGL core course	P: Min of C- in MECT 1364 & MATH 2312 or equivalents		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">MECT 4331 3 major</td> <td style="text-align: center;"> 3 </td> </tr> <tr> <td style="text-align: center;">Heat Transfer App</td> <td style="text-align: center;">Lang, Phil & Culture</td> </tr> <tr> <td style="text-align: center;">P: Min of C- in MECT 3318 & 3331</td> <td style="text-align: center;">Choose from core approved list</td> </tr> </table>	MECT 4331 3 major	3	Heat Transfer App	Lang, Phil & Culture	P: Min of C- in MECT 3318 & 3331	Choose from core approved list
CHEM 1305/1105 3	PHYS 1301/1101 4 NS																													
Foundations of Chemistry I	College Physics I & Lab																													
P: enrolled or completed MATH 1314 or 1332	P: MATH 2312 or equiv																													
PHYS 1302/1102 4 NS	MECT 3360 3 major																													
College Physics II & Lab	Automated Manufacturing Systems																													
P: PHYS 1301	P: Min of C- in MECT 1364																													
CORE 3 SS	MECT 3367 3 major																													
Social & Beh Sci or OR TECH 1313	Quality Control Technology																													
P: enrolled or completed MATH & ENGL core course	P: Min of C- in MECT 1364 & MATH 2312 or equivalents																													
MECT 4331 3 major	3																													
Heat Transfer App	Lang, Phil & Culture																													
P: Min of C- in MECT 3318 & 3331	Choose from core approved list																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">HIST 1301 3 Hist</td> <td style="text-align: center;">HIST 1302 3 Hist</td> </tr> <tr> <td style="text-align: center;">The U.S. to 1877 (formerly HIST 1377)</td> <td style="text-align: center;">The U.S. to 1877 (formerly HIST 1378)</td> </tr> <tr> <td style="text-align: center;">P: None</td> <td style="text-align: center;">P: None</td> </tr> </table>	HIST 1301 3 Hist	HIST 1302 3 Hist	The U.S. to 1877 (formerly HIST 1377)	The U.S. to 1877 (formerly HIST 1378)	P: None	P: None		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">ELET 2300 3 math</td> <td style="text-align: center;">ELET 2307 3 </td> </tr> <tr> <td style="text-align: center;">Introduction To C++ Programming</td> <td style="text-align: center;">Electrical-Electronic Circuits</td> </tr> <tr> <td style="text-align: center;">P: MATH 2312</td> <td style="text-align: center;">P: Completed or enrolled MATH 2312</td> </tr> </table>	ELET 2300 3 math	ELET 2307 3	Introduction To C++ Programming	Electrical-Electronic Circuits	P: MATH 2312	P: Completed or enrolled MATH 2312		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">TLIM 3363 3 WID</td> <td style="text-align: center;">TLIM 3340 3 </td> </tr> <tr> <td style="text-align: center;">Technical Communication</td> <td style="text-align: center;">Organizational Leadership and Supervision</td> </tr> <tr> <td style="text-align: center;">P: ENGL 1302 with C or better</td> <td style="text-align: center;">P: Enrolled or Taken TLIM 3363</td> </tr> </table>	TLIM 3363 3 WID	TLIM 3340 3	Technical Communication	Organizational Leadership and Supervision	P: ENGL 1302 with C or better	P: Enrolled or Taken TLIM 3363		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">MECT ELEC 3 major</td> <td style="text-align: center;">MECT ELEC 3 major</td> </tr> <tr> <td style="text-align: center;">Approved Elective</td> <td style="text-align: center;">Approved Elective</td> </tr> <tr> <td style="text-align: center;">Choose from approved list</td> <td style="text-align: center;">Choose from approved list</td> </tr> </table>	MECT ELEC 3 major	MECT ELEC 3 major	Approved Elective	Approved Elective	Choose from approved list	Choose from approved list
HIST 1301 3 Hist	HIST 1302 3 Hist																													
The U.S. to 1877 (formerly HIST 1377)	The U.S. to 1877 (formerly HIST 1378)																													
P: None	P: None																													
ELET 2300 3 math	ELET 2307 3																													
Introduction To C++ Programming	Electrical-Electronic Circuits																													
P: MATH 2312	P: Completed or enrolled MATH 2312																													
TLIM 3363 3 WID	TLIM 3340 3																													
Technical Communication	Organizational Leadership and Supervision																													
P: ENGL 1302 with C or better	P: Enrolled or Taken TLIM 3363																													
MECT ELEC 3 major	MECT ELEC 3 major																													
Approved Elective	Approved Elective																													
Choose from approved list	Choose from approved list																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">ENGL 1301 3 Comm</td> <td style="text-align: center;">ENGL 1302 3 Comm</td> </tr> <tr> <td style="text-align: center;">First Year Writing I</td> <td style="text-align: center;">First Year Writing I</td> </tr> <tr> <td style="text-align: center;">P: app score on TSI</td> <td style="text-align: center;">P: ENGL 1301 or equivalent</td> </tr> </table>	ENGL 1301 3 Comm	ENGL 1302 3 Comm	First Year Writing I	First Year Writing I	P: app score on TSI	P: ENGL 1301 or equivalent		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">GOVT 2306 3 POLS</td> <td style="text-align: center;">GOVT 2305 3 POLS</td> </tr> <tr> <td style="text-align: center;">US & Texas Const & Politics</td> <td style="text-align: center;">US Government</td> </tr> <tr> <td style="text-align: center;">P: None</td> <td style="text-align: center;">P: None</td> </tr> </table>	GOVT 2306 3 POLS	GOVT 2305 3 POLS	US & Texas Const & Politics	US Government	P: None	P: None		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;"> 3 </td> <td style="text-align: center;">MECT ELEC 3 major</td> </tr> <tr> <td style="text-align: center;">Creative Arts</td> <td style="text-align: center;">Approved Elective</td> </tr> <tr> <td style="text-align: center;">Choose from core approved list</td> <td style="text-align: center;">Choose from approved list</td> </tr> </table>	3	MECT ELEC 3 major	Creative Arts	Approved Elective	Choose from core approved list	Choose from approved list		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">MECT ELEC 3 major</td> <td style="text-align: center;">Free ELEC 3 </td> </tr> <tr> <td style="text-align: center;">Approved Elective</td> <td style="text-align: center;">Free elective</td> </tr> <tr> <td style="text-align: center;">Choose from approved list</td> <td style="text-align: center;"></td> </tr> </table>	MECT ELEC 3 major	Free ELEC 3	Approved Elective	Free elective	Choose from approved list	
ENGL 1301 3 Comm	ENGL 1302 3 Comm																													
First Year Writing I	First Year Writing I																													
P: app score on TSI	P: ENGL 1301 or equivalent																													
GOVT 2306 3 POLS	GOVT 2305 3 POLS																													
US & Texas Const & Politics	US Government																													
P: None	P: None																													
3	MECT ELEC 3 major																													
Creative Arts	Approved Elective																													
Choose from core approved list	Choose from approved list																													
MECT ELEC 3 major	Free ELEC 3																													
Approved Elective	Free elective																													
Choose from approved list																														
16	17	17	17	15	15	15	12																							
Total credit hours required =						124																								

Design, Manufacturing, & Automation Electives

*MECT 3330 P: MECT 1330
 MECT 3362 P: C- in MECT 1330 & 1364
 *MECT 3364 P: MECT 1364
 *MECT 3368 P: MATH 1431
 MECT 4323 P: C- in MATH 1432 & MECT 3355
 MECT 4350 P: C- in ELET 2307 & MECT 3358 or equiv
 *MECT 4364 P: MECT 3360
 MECT 4365 P: C- in MECT 3365 or equiv
 *MECT 4368 P: MECT 3367
 MECT 4384 P: C- in MECT 3360 or equiv
 MECT 4397

Materials & Energy Electives

MECT 3345 P: C- in TECH 1325, MECT 3331
 MECT 4326 P: C- in MECT 3358 & 3365
 MECT 4328 P: C- in MECT 3318 & 3365
 MECT 4330 P: C- in MECT 3365
 MECT 4341 P: C- in MECT 3365 & 4372
 MECT 4343 P: C- in MECT 3331 & 4372
 MECT 4345 P: C- in Chem 1301 & MECT 3318
 MECT 4397

Major courses
 Free Elective
 Core courses
 Departmental requirements
 * taught in Sugar Land

Courses required for Degree are based on catalog year student declares major, please verify this is the correct course sequence.
 Prerequisites for course are effective at the time student enrolls in coursework and may change, please check catalog for current prerequisites.