

**South Texas College  
College-Wide Curriculum Committee  
Meeting Agenda Packet**

**I. Call to Order**

**II. Housekeeping Rules**

1. All members, ex-officio members and guests must sign in with your name and department in the chat window so we can verify attendance and document for the meeting minutes.
2. Please keep microphones on mute to minimize background noise and unmute as needed for questions or voting.
3. Remember to state your name when presenting an item or making a motion.
4. This Committee is a voting committee. Only voting members can make a motion and vote. (Alternates may only vote if the representative is not in attendance.)

**III. Minutes from Meeting of November 15, 2022**

**IV. New Business**

**A. Informational Item:**

**1. Proposed new dual credit high school site – Mercedes Early College Academy.**

Justification: Mercedes Early College Academy has a new high school site that is offering between 25-49% of coursework towards Associate degrees. The high school site plans to expand course offerings to accommodate growth at the campus. This item is brought to the committee for feedback and comments for the proposed plan.

**B. Sociology**

**1. Addition of SOCW 2361 – Introduction to Social Work to the Component Area Option – Core Curriculum.**

COMPONENT AREA OPTION			3-4 credits
AGRI	1415	Horticulture	
AGRI	1407	Agronomy	
AGRI	1329	Principles of Food Science	
AGRI	2330	Wildlife Conservation and Management	
BCIS	1305	Business Computer Applications	
BIOL	1322	Nutrition and Diet Therapy	
BIOL	2406	Environmental Biology	
BIOL	2416	Genetics	
BIOL	2421	Microbiology for Science Majors	
CHEM	2423	Organic Chemistry I	
CHEM	2425	Organic Chemistry II	
COSC	1301	Introduction to Computing	
COSC	1320	C Programming	
COSC	1337	Programming Fundamentals II	
COSC	1436	Programming Fundamentals I	
COSC	2425	Computer Organization	
COSC	2436	Programming Fundamentals III	
EDUC	1100	Learning Framework	
EDUC	1300	Learning Frameworks	
ENGR	1201	Introduction to Engineering	
ENGR	1304	Engineering Graphics	
ENGR	2301	Engineering Mechanics - Statics	
ENGR	2302	Engineering Mechanics - Dynamics	
ENGR	2405	Electrical Circuits I	
GEOL	1404	Historical Geology	
KINE	1164	Introduction to Physical Fitness and Wellness	
MATH	2305	Discrete Mathematics	
MATH	2418	Linear Algebra	
MATH	2420	Differential Equations	
PHIL	1301	Introduction to Philosophy	
PHIL	1304	Introduction to World Religions	
PHIL	2303	Introduction to Logic	
PHIL	2306	Introduction to Ethics	
PHIL	2307	Introduction to Social and Political Philosophy	
PHIL	2316	Classical Philosophy	
PHIL	2321	Philosophy of Religion	
PSYC	1300	Learning Frameworks	
PSYC	2301	General Psychology	
SPCH	1311	Introduction to Speech Communication	
SPCH	1315	Public Speaking	
SPCH	1318	Interpersonal Communications	
SPCH	1321	Business and Professional Communication	
SPCH	2333	Discussion and Small Group Communication	
SPCH	2335	Argumentation and Debate	
SOCI	1301	Introduction to Sociology	
SOCI	1306	Social Problems	
SOCW	2361	Introduction to Social Work	

Justification: The proposed addition to include this course in the Component Area Option will allow more options to students.

**C. Sociology**

**1. Approval for proposed Associate of Arts in Sociology, Applied Sociology Track.**

<b>ASSOCIATE OF ARTS IN SOCIOLOGY</b> <b>APPLIED SOCIOLOGY TRACK</b> (Includes Certification in Applied Sociology by AACCS) AY 2023-2024 Recommended Course Sequence		
<b>FIRST YEAR</b>		
<b>FALL</b>		
	<b>Credit Hours</b>	
SOCI 1301	Introduction to Sociology or SOCI 1306 Social Problems	3
HIST 1301	United States History I or HIST 2327 Mexican American History	3
ENGL 1301	Composition I	3
MATH 1414	College Algebra	4
<b>SPRING</b>		
SOCI 1306	Social Problems or SOCI 1301 Introduction to Sociology	3
HIST 1302	United States History II or HIST 2328 Mexican-American History	3
ENGL 1302	Composition II	3
	Social & Behavioral Science Elective - Core Curriculum	3
	<b>Recommended:</b> PSYC 2301 General Psychology SOCI 2301 Sociology of the Family SOCI 2319 Minority Studies TECA 1354 Child Growth & Development	
<b>SUMMER</b>		
	Life and Physical Science – Core Curriculum	4
	Language, Philosophy & Culture Elective – Core Curriculum	3
	<b>Recommended:</b> ENGL 2331 World Literature ENGL 2351 Mexican American Literature HUMA 1305 Introduction to Mexican- American Studies HUMA 2319 American Minority Studies HUMA 2323 World Cultures PHIL 1304 Introduction to World Religions	
	Component Area Option – Core Curriculum	3-4
	<i>**Students should meet with department advisors to formally indicate their area of focus in this semester</i>	
<b>SECOND YEAR</b>		
<b>FALL</b>		
	Creative Arts Elective – Core Curriculum	3
PSYC 2317	Statistical Methods	3
GOVT 2305	Federal Government	3

Field of Study Elective I 3-4

**SPRING**

GOVT 2306 Texas Government	3
Life and Physical Sciences Elective– Core Curriculum	4
Field of Study Electives II	3-4
SOCI 2389 Academic Cooperative	3

\*\*Students should meet with departmental advisors to formalize their certification of Applied Sociology with AACSB during the beginning of this semester.

To earn an Associate’s Degree in Sociology by following the Applied Sociology Track, students would need to complete the following requirements:

1. Students will complete both either SOCI 1301 – Introduction to Sociology or SOCI 1306 – Social Problems, then complete one other Sociology class at the 1000 or 2000 level, all of which are eligible for transfer to higher degree programs via the THECB Texas Transfer Framework. These courses are already available within the current Sociology Curriculum and Field of Study.
2. Students will select and complete PSYC 2317 – Statistical Methods in Psychology to deepen their understanding of statistical, data analysis, or other applied sociological skills.
3. Students will complete 2 classes (or 6 credits) of course work in a discipline of their choice; both classes must be chosen from the same field of study, must be from academic AA or AS program, and must include an introductory-level course. **Students must consult with the program’s advising team in order to declare an area of focus and have it noted in their Degree Works profile.** These classes will help guide the selection of the organization for their Academic Cooperative, SOCI 2389.

Current options include:

Field of Study Elective I (3-4 Credits) (Introductory-Level Course)	Field of Study Elective II (3-4 Credits)
<b>Social &amp; Behavioral Science Division</b>	
ANTH 2301 Physical Anthropology	ANTH 2302 Introduction to Archeology ANTH 2351 Cultural Anthropology
CRIJ 1301 Introduction to Criminal Justice	CRIJ 1307 Crime in America CRIJ 1310 Fundamentals of Criminal Law CRIJ 1313 Juvenile Justice System CRIJ 2313 Correctional Systems & Practices
EDUC 1301 Introduction to Teaching Professions	EDUC 2301 Introduction to Special Populations
GOVT 2304 Introduction to Political Science	GOVT 2311 Mexican American & Latinx Politics
KINE 1301 Foundations of Kinesiology	KINE 1304
PSYC 2301 General Psychology	PSYC 2308 Child Psychology PSYC 2315 Psychology of Adjustment

	PSYC 2319 Social Psychology
SOCI 2301 Marriage and Family	SOCI 2319 Minority Studies
TECA 1303 Family, School, Community	TECA 1311 Educating Young Children TECA 1313 Wellness of the Young Child TECA 1354 Child Growth and Development
<b>Liberal Arts Division</b>	
COMM 1307 Introduction to Mass Communication	COMM 2311 Media Writing COMM 2315 News Reporting COMM 2339 Writing for Radio, Television and Film
DANC 2303 Dance Appreciation	DANC 1301 Dance Composition – Choreography DANC 1305 World Dance
DRAM 1310 Theater Appreciation	DRAM 1330 Stagecraft I DRAM 1351 Acting I DRAM 2355 Script Analysis
ENGL 2311 Technical and Business Writing ENGL 2331 World Literature	ENGL 2321 British Literature ENGL 2326 American Literature ENGL 2341 Introduction to Forms of Literature ENGL 2351 Mexican American Literature
HIST 2301 Texas History	HIST 2321 World Civilizations I HIST 2322 World Civilizations II
HUMA 1301 Introduction to Humanities I (Western) HUMA 1305 Introduction to Mexican American Studies	HUMA 1302 Introduction to Humanities II (Non-Western) HUMA 1311 Mexican-American Fine Arts Appreciation HUMA 2319 American Minority Culture
MUSI 1303 Fundamentals of Music	MUSI 1306 Music Appreciation MUSI 1307 Music Literature MUSI 1310 American Music
PHIL 1301 Introduction to Philosophy PHIL 1304 Introduction to World Religions	PHIL 2303 Introduction to Logic PHIL 2306 Introductions to Ethics PHIL 2316 Introduction to Social & Political Philosophy
<b>Math, Science, IT &amp; BA</b>	
AGRI 1329 Principles of Food Science	AGRI 1407 Agronomy AGRI 1415 Horticulture
BIOL 1322 Nutrition and Diet Therapy BIOL 1406 Biology for Science Majors I	BIOL 1406 Biology for Science Majors I BIOL 1407 Biology for Science Majors II BIOL 2401 Anatomy and Physiology I BIOL 2406 Environmental Biology
CHEM 1405 Introductory Chemistry for Non-Science Majors CHEM 1411 General Chemistry I	CHEM 1407 Introductory Chemistry II for Non-Science Majors CHEM 1409 General Chemistry for Engineering Majors

	CHEM 1412 General Chemistry
COSC 1301 Introduction to Computing	COSC 1315 Introduction to Computer Programming COSC 1320 C Programming COSC 1436 Programming Fundamentals I
ENGR 1201 Introduction to Engineering	ENGR 1304 Engineering Graphics ENGR 2301 Engineering Mechanics – Statics ENGR 2302 Engineering Mechanics - Dynamics
GEOL 1403 Physical Geology	GEOL 1404 Historical Geology GEOL 1455 Oceanography
<b>Business, Public Safety and Technology</b>	
ARCH 1311 Introduction to Architecture	ARCH 1301 Architectural History I ARCH 1303 Architectural Design I
ACCT 2401 Principles of Financial Accounting	ACCT 2402 Principles of Managerial Accounting
BUSI 1301 Business Principles	BUSI 2301 Business Law
ECON 2301 Principles of Economics I – Macro	ECON 2302 Principles of Economics II – Micro

4. Students will complete SOCI 2389 Academic Cooperative, defined by THECB in the following manner: "SOCI 2389 Academic Cooperative (3 SCH version) An instructional program designed to integrate on -campus study with practical hands-on experience in sociology. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior and/or social institutions." This class will be structured around an internship model and will require volunteer hours with a local community organization of the student's choice, pertinent to their career goals. Students, under the guidance of a faculty member, will develop a project designed to benefit the organization and community through the application of sociological principles.
5. As part of the Academic Cooperative, students will participate in either live or pre-recorded workshops for the Association for Applied and Clinical Sociology (AACS) Annual Conference and receive recognition from AACS for their participation/attendance. As the AACS website states: "The certificate program offers the opportunity for students to increase their core competencies, expand foundations of disciplinary knowledge, and engage in career exploration and preparation. These areas of concentration expand sociology students' professional development in our discipline. Students will need to attend three virtual professional development workshops and three conference sessions that align with their goals and desired areas of personal growth. Once all 6 sessions are attended, participants must write a 2- 3 page reflection on the sessions and their relevance to their own practice of sociology and future aspirations." <https://www.aacsnet.net/professional-development-certificate/>
6. As part of the Academic Cooperative, students will complete 5 or more workshops with the Office of Career and Employer Services to ensure they know how to effectively

search for a job, craft a resume, interview, and otherwise experience career success after graduation. These workshops will include: 1) Financial Literacy training enabling students to build and analyze a) a financial plan and b) a budget for individuals and organizations; 2) Grow with Google training in digital literacy including building surveys, power point slides, and other professional digital tools; 3) Interviewing and Resume creation workshops; 4) Professional appearance including THREADS, the Professional Clothing Closet; and 5) any of the other varied career workshops offered by Career & Employer Services. Most-if not all-of these workshops can be completed online asynchronously.

7. Students will present the results of their research and internship experience as part of the SOCI 2389 Academic Cooperative class, and will also submit a proposal based on their internship experience to an academic conference for a paper, round table, or poster session. If the proposal is accepted and the student decides to participate in the conference, students will network, be better prepared for professional development experiences in their future careers, and will strengthen their resumes for competitive scholarships in Bachelor's and Master's degree programs in the future.

Justification: The proposed Applied Sociology track will offer students a professional certification in applied sociology, field experience, and connection to a network of professional practitioners upon graduation.

#### **D. Psychological Science**

##### **1. Addition of PSYC 2301 – General Psychology to the Component Area - Core Curriculum.**

COMPONENT AREA OPTION			3-4 credits
AGRI	1415	Horticulture	
AGRI	1407	Agronomy	
AGRI	1329	Principles of Food Science	
AGRI	2330	Wildlife Conservation and Management	
BCIS	1305	Business Computer Applications	
BIOL	1322	Nutrition and Diet Therapy	
BIOL	2406	Environmental Biology	
BIOL	2416	Genetics	
BIOL	2421	Microbiology for Science Majors	
CHEM	2423	Organic Chemistry I	
CHEM	2425	Organic Chemistry II	
COSC	1301	Introduction to Computing	
COSC	1320	C Programming	
COSC	1337	Programming Fundamentals II	
COSC	1436	Programming Fundamentals I	
COSC	2425	Computer Organization	
COSC	2436	Programming Fundamentals III	
EDUC	1100	Learning Framework	
EDUC	1300	Learning Frameworks	
ENGR	1201	Introduction to Engineering	
ENGR	1304	Engineering Graphics	
ENGR	2301	Engineering Mechanics - Statics	
ENGR	2302	Engineering Mechanics - Dynamics	
ENGR	2405	Electrical Circuits I	
GEOL	1404	Historical Geology	
KINE	1164	Introduction to Physical Fitness and Wellness	
MATH	2305	Discrete Mathematics	
MATH	2418	Linear Algebra	
MATH	2420	Differential Equations	
PHIL	1301	Introduction to Philosophy	
PHIL	1304	Introduction to World Religions	
PHIL	2303	Introduction to Logic	
PHIL	2306	Introduction to Ethics	
PHIL	2307	Introduction to Social and Political Philosophy	
PHIL	2316	Classical Philosophy	
PHIL	2321	Philosophy of Religion	
PSYC	1300	Learning Frameworks	
PSYC	2301	General Psychology	
SPCH	1311	Introduction to Speech Communication	
SPCH	1315	Public Speaking	
SPCH	1318	Interpersonal Communications	
SPCH	1321	Business and Professional Communication	
SPCH	2333	Discussion and Small Group Communication	
SPCH	2335	Argumentation and Debate	
SOCI	1301	Introduction to Sociology	
SOCI	1306	Social Problems	
SOCW	2361	Introduction to Social Work	

Justification: The proposed addition to include the course in the Component Area Option will help expand options to students.

**E. Criminal Justice**

**1. Revision of course prerequisite for CRIJ 1301 – Introduction to Criminal Justice.**

**Current:**

**CRIJ 1301 Introduction to Criminal Justice**

CRT HRS:03 LEC HRS:03 LAB HRS:00 OTH HRS:

This course provides a historical and philosophical overview of the American criminal justice system, including the nature, extent, and impact of crime; criminal law; and justice agencies and processes.

Prerequisite: TSI complete in Reading and Writing, or equivalent, or co-enrolled in INRW 0304.

**Proposed:**

Prerequisite: TSI complete in Reading and Writing, or equivalent, or co-enrolled in INRW 0030.

Justification: The proposed change is to align with the recent changes made to the TSI 2.0 placement scale.

**F. Criminal Justice**

**1. Requirement of CRIJ 1301 – Introduction to Criminal Justice for the Social & Behavioral Sciences Elective – Core Curriculum.**

Justification: The Criminal Justice department is requesting the following modification as part of the recently approved Texas Transfer Framework field of study from THECB. Beginning Fall 2023, the Criminal Justice course, CRIJ 1301, will be a requirement for the Social & Behavioral Sciences Core Curriculum component.

**G. Criminal Justice**

**1. Addition of PSYC 2301 – General Psychology, SOCI 1301 – Introductory Sociology, and SOCW 2361- Introduction to Social Work as additional elective options for the Component Area Option – Core Curriculum.**

Justification: The proposed request is contingent upon the Psychological Science, Sociology and Social Work departments adding elective options to the Component Area Option Core Curriculum. The Criminal Justice department would like to add these courses to the Component Area Option to help expand options to students.

**CRIMINAL JUSTICE  
RECOMMENDED COURSE SEQUENCE**

<b>FIRST SEMESTER</b>		<b>Credit Hours</b>
	<del>*Criminal Justice Elective—Field of Study</del>	<del>3</del>
HIST 1301	United States History I or HIST 2327	3
ENGL 1301	Composition	3
	Social & Behavioral Sciences Elective – Core Curriculum (Required: CRIJ 1301 Introduction to Criminal Justice)	3
	Creative Arts Elective – Core Curriculum	3
 <b>SECOND SEMESTER</b>		
HIST 1302	United States History II or HIST 2328	3
ENGL 1302	Composition II - Rhetoric	3
GOVT 2305	Federal Government	3
	<del>*Criminal Justice Elective—Field of Study</del>	<del>3</del>
CRIJ 1306	Court Systems and Practices	3
 <b>THIRD SEMESTER</b>		
	Component Area Option-Core Curriculum - EDUC 1300 or PSYC 1300 or SPCH 1311 or SPCH 1315 or SPCH 1318 or SPCH 1321 or SPCH 2333 or SPCH 2335, or PSYC 2301, or SOCI 1301, or SOCW 2361	3
	<del>Creative Arts Elective—Core Curriculum</del>	<del>3</del>
GOVT 2306	Texas Government	3
	<del>Language, Philosophy &amp; Culture Elective—Core Curriculum</del> (Strongly Recommended: PHIL 2306—Intro. to Ethics: Emphasis in Criminal Justice)	<del>3</del>
CRIJ 1310	Fundamentals of Criminal Law	3
 <b>FOURTH SEMESTER</b>		
	Mathematics Elective-Core Curriculum (Recommended: MATH 1414 College Algebra)	3-4
	Life and Physical Sciences Elective - Core Curriculum	4
CRIJ 2313	Correctional Systems and Practices	3
	<del>PSYC 2301 General Psychology, SOCI 1301 Introductory Sociology or SOCW 2361 Introduction to Social Work</del>	<del>3</del>
	<del>*Criminal Justice Elective—Field of Study</del>	<del>3</del>
CRIJ 2328	Police Systems and Practices	3
 <b>FIFTH SEMESTER</b>		
	<del>GOVT 2306 Texas Government</del>	<del>3</del>
	Life and Physical Sciences Elective— Core Curriculum	4
	Language, Philosophy & Culture Elective – Core Curriculum (Strongly Recommended: PHIL 2306 – Intro. to Ethics: Emphasis in Criminal Justice)	3
CRIJ 1307	Crime in America	3
CRIJ 1313	Juvenile Justice System	3
	<del>*Criminal Justice Elective—Field of Study</del>	<del>3</del>
	<del>*Criminal Justice Elective—Field of Study</del>	<del>3</del>

## H. Advanced Manufacturing

### 1. Deactivation of Precision Manufacturing Technology Occupational Skills Award.

<b>OCCUPATIONAL SKILLS AWARD PRECISION MANUFACTURING TECHNOLOGY CIP: 480507 2023-2024</b>							
			Lec.	Lab	Ext.	Cont.	Cred. Hrs.
<b><u>FIRST SEMESTER</u></b>							
DFTG 1325	Blueprint Reading & Sketching	(15.1301)	2	3	0	80	3
MCHN 1338	Basic Machine Shop	(48.0501)	1	6	0	112	3
MCHN 1320	Precision Tools & Measurement	(48.0501)	2	4	0	96	3
Total Contact Hours: 288							
Total Credit Hours: 9							

Justification: A recommendation to the Advisory Committee was made to sunset the Precision Manufacturing Technology OSA due to the award no longer needed.

## I. Engineering

### 1. Approval for proposed Dual Enrollment Engineering Track for the Engineering Associate of Science.

**DUAL ENROLLMENT ENGINEERING TRACK  
RECOMMENDED COURSE SEQUENCE**

	<b>Credit Hours</b>
<b>FIRST YEAR</b>	
<b>Summer Session I &amp; II</b>	
MATH 1414 College Algebra	4
MATH 2412 Pre-Calculus & Trigonometry	4
ENGR 1201 Introduction to Engineering (SSII)	2
<b>Fall</b>	
MATH 2413 Calculus I	4
HIST 1301 United States History I	3
ENGL 1301 Composition	3
ENGR 1304 Engineering Graphics I	3
<b>Spring</b>	
MATH 2414 Calculus II	4
ENGL 1302 Composition II-Rhetoric	3
CHEM 1409 General Chemistry for Engineering Majors	4
HIST 1302 United States History II	3
<b>SECOND YEAR</b>	
<b>Summer Session I &amp; II</b>	
PHIL 2306 Intro to Ethics	3
PHYS 2425 University Physics I (SSII)	4
MUSI 1306 Music Appreciation	3
<b>Fall</b>	
MATH 2420 Differential Equations	4
GOVT 2305 Federal Government	3
ENGR 2301 Statics	3
PHYS 2426 University Physics II	4
<b>Spring</b>	
GOVT 2306 Texas Government	3
ECON 2301 Principles of Economics I – Macro	3
ENGR 2405 Electrical Circuits I	4
ENGR 2302 Dynamics	3

Justification: The proposed revisions are necessary due to the addition of co-requisite of MATH 2420 to ENGR 2405. Also, the proposed revisions are necessary in order to continue to offer courses in the state-wide engineering field of study and to facilitate transfer to a bachelor degree program with a minimal loss of credit hours.

**J. Engineering**

**1. Reduction to the Core Curriculum for the Associate of Science in Engineering from 37 to 33 credits.**

Justification: The proposed revisions are necessary due to the addition of co-requisite of MATH 2420 to ENGR 2405. Also, the proposed revisions are necessary in order to continue to offer courses in the state-wide engineering field of study and to facilitate transfer to a bachelor degree program with a minimal loss of credit hours.

**K. Engineering**

**1. Requirement of MATH 2420 – Differential Equations or ENGR 1304 – Engineering Graphics for the Component Area Option – Core Curriculum.**

Justification: The proposed revisions are necessary due to the addition of co-requisite of MATH 2420 to ENGR 2405. Also, the proposed revisions are necessary in order to continue to offer courses in the state-wide engineering field of study and to facilitate transfer to a bachelor degree program with a minimal loss of credit hours.

**ASSOCIATE OF SCIENCE  
FIELD OF STUDY IN ENGINEERING  
AS-INTE**

**2023-2024  
TSI LIABLE**

**FIELD OF STUDY ~~23-26~~ 26-30 Credits**

All engineering students (14 credits):

ENGR 1201 Introduction to Engineering  
MATH 2414 Calculus II  
MATH 2415 Calculus III **or** MATH 2420 Differential Equations<sup>2</sup>  
CHEM 1409 General Chemistry for Engineering Majors<sup>3</sup>

**General/Mechanical/Manufacturing Track (~~9~~ 13 Credits)**

ENGR 1304 Engineering Graphics  
ENGR 2301 Engineering Mechanics - Statics  
ENGR 2302 Engineering Mechanics – Dynamics  
**ENGR 2405 Electrical Circuits I**

**Civil Engineering Track (~~10~~ 13 credit hours)**

**ENGR 1304 Engineering Graphics**  
GEOL 1403 Physical Geology  
ENGR 2301 Engineering Mechanics - Statics  
ENGR 2302 Engineering Mechanics - Dynamics

**Electrical/ Engineering Track (12 Credits)**

COSC 1436 Programming Fundamentals I  
ENGR 2406 Introduction to Digital Systems  
ENGR 2405 Electrical Circuits I

**Computer Engineering Track (~~12~~ 16 Credits)**

COSC 1436 Programming Fundamentals I  
COSC 2425 Computer Organization  
**ENGR 2405 Electrical Circuits I**  
ENGR 2406 Digital Systems Engineering I

**Chemical/Environmental/Petroleum Engineering Track (~~11~~ 15 Credits)**

**Take all of these:**

CHEM 1412 General Chemistry II  
ENGR 2301 Engineering Mechanics-Statics  
**CHEM 2423 Organic Chemistry I**

*Choose One Course:*

CHEM 2425 Organic Chemistry II **OR** (Chemical Engineering)  
BIOL 1406 Biology for Science Majors I **OR** (Environmental Engineering)  
GEOL 1403 Physical Geology (Petroleum Engineering)

**Dual Enrollment Engineering Track (10 Credits)\***

ENGR 2301 Engineering Mechanics – Statistics  
ENGR 2302 Engineering Mechanics – Dynamics  
ENGR 2405 Electrical Circuits I

**STC CORE CURRICULUM** **33 - 37 credits**

In addition to the courses in the Field of Study, the student is required to take a **minimum of 33** ~~37~~ hours from the STC Core Curriculum listed on page \*\*\* of the catalog. **Please note students will not be core complete upon completing this degree program. The Engineering program requires specific courses to be taken within the Core. The required courses are as follows:**

**Mathematics**

MATH 2413 Calculus I

**Life and Physical Sciences**

PHYS 2425 University Physics I  
PHYS 2426 University Physics II

**Core Component Area Option<sup>4</sup>**

~~ENGR 2405—Electrical Circuits I~~ **or**  
~~CHEM 2423—Organic Chemistry I~~ **or**  
MATH 2420 Differential Equations **or**  
ENGR 1304 Engineering Graphics **or**  
Component Area Option course

Students who would like to be Core complete upon transfer should also complete courses from the following Core component areas:

Social and Behavioral Sciences Elective: 3 credits (Recommended: ECON 2301)  
Language, Philosophy & Culture Elective – 3 credits (Recommended: PHIL 2306)  
Creative Arts Elective – Core Curriculum – 3 credits

*\*Students following the Dual Enrollment Academy Track must complete a minimum of 37 credit hours of Core courses.*

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FIELD OF STUDY: ~~23~~ 26 - 30  
STC CORE CURRICULUM: ~~37~~ 34  
TOTAL CREDIT HOURS: 60-63

<sup>1</sup>Students must select Engineering Electives from the same track.

<sup>2</sup>Students following the Computer Engineering or Dual Enrollment Academy track must take MATH 2420 and all others must take MATH 2415.

<sup>3</sup>Students following the Chemical/Environmental/Petroleum Engineering Track must take CHEM 1411 and all others must take CHEM 1409.

<sup>4</sup>Students following the Mechanical/General/Manufacturing, Civil, or Electrical tracks must take MATH 2420 in order to fulfill the co-requisite requirement for ENGR 2405. Dual Enrollment Academy track must complete ENGR 1304. All others should speak with an Engineering Faculty Advisor to select a course based on transferring institution and career interests.

## L. Physics

### 1. Addition of GEOL 1404 – Historical Geology to the Component Area Option – Core Curriculum.

COMPONENT AREA OPTION		3-4 credits
AGRI	1415	Horticulture
AGRI	1407	Agronomy
AGRI	1329	Principles of Food Science
AGRI	2330	Wildlife Conservation and Management
BCIS	1305	Business Computer Applications
BIOL	1322	Nutrition and Diet Therapy
BIOL	2406	Environmental Biology
BIOL	2416	Genetics
BIOL	2421	Microbiology for Science Majors
CHEM	2423	Organic Chemistry I
CHEM	2425	Organic Chemistry II
COSC	1301	Introduction to Computing
COSC	1320	C Programming
COSC	1337	Programming Fundamentals II
COSC	1436	Programming Fundamentals I
COSC	2425	Computer Organization
COSC	2436	Programming Fundamentals III
EDUC	1100	Learning Framework
EDUC	1300	Learning Frameworks
ENGR	1201	Introduction to Engineering
ENGR	1304	Engineering Graphics
ENGR	2301	Engineering Mechanics - Statics
ENGR	2302	Engineering Mechanics - Dynamics
ENGR	2405	Electrical Circuits I
GEOL	1404	Historical Geology
KINE	1164	Introduction to Physical Fitness and Wellness
MATH	2305	Discrete Mathematics
MATH	2418	Linear Algebra
MATH	2420	Differential Equations
PHIL	1301	Introduction to Philosophy
PHIL	1304	Introduction to World Religions
PHIL	2303	Introduction to Logic
PHIL	2306	Introduction to Ethics
PHIL	2307	Introduction to Social and Political Philosophy
PHIL	2316	Classical Philosophy
PHIL	2321	Philosophy of Religion
PSYC	1300	Learning Frameworks
PSYC	2301	General Psychology
SPCH	1311	Introduction to Speech Communication
SPCH	1315	Public Speaking
SPCH	1318	Interpersonal Communications
SPCH	1321	Business and Professional Communication
SPCH	2333	Discussion and Small Group Communication
SPCH	2335	Argumentation and Debate
SOCI	1301	Introduction to Sociology
SOCI	1306	Social Problems
SOCW	2361	Introduction to Social Work

Justification: Adding the GEOL 1404 to the Core Component Area Option will facilitate the creation of Geophysics and Environmental Science tracks. This change will keep the field of study credit hours at 18 and will minimize loss of credit hours.

## M. Physics

### 1. Approval for proposed Geophysics Track for the Physics Associate of Science.

<b>PHYSICS-GEOPHYSICS TRACK RECOMMENDED COURSE SEQUENCE</b>		<b>Credit Hours</b>
<b>FIRST YEAR</b>		
<b>FALL</b>		
MATH 2413	Calculus I*	4
GEOL 1403	Physical Geology	4
ENGL 1301	Composition I	3
	Creative Arts Elective – Core Curriculum	3
<b>SPRING</b>		
ENGL 1302	Composition II – Rhetoric	3
CHEM 1411	General Chemistry I	4
MATH 2414	Calculus II	4
HIST 1301	United States History I or HIST 2327	3
<b>SUMMER</b>		
HIST 1302	United States History II or HIST 2328	3
<b>SECOND YEAR</b>		
<b>FALL</b>		
PHYS 2425	University Physics I	4
CHEM 1412	General Chemistry II	4
GOVT 2305	Federal Government	3
	Social & Behavioral Science Elective – Core Curriculum (Recommended: PSYC 2301- General Psychology)	3
<b>SPRING</b>		
GOVT 2306	Texas Government	3
PHYS 2426	University Physics II	4
GEOL 1404	Historical Geology**	4
	Core Component Area Option	1-3
<b>SUMMER</b>		
	Language, Philosophy & Culture Elective	3
<b>*For students to directly enroll into MATH 2413 Calculus 1, they must earn a score of 980+ on the math portion of the TSIA2 Exam and successfully complete an exam administered by the MATH department.</b>		
<b>**GEOL 1404 Historical Geology is scheduled for 2 hours of field of study and 2 hours of general education requirements (Component Area Option)</b>		

Justification: The proposed Geophysics track will provide an academic path with strong credentials to the students interested in pursuing Geophysics, Environmental Geophysics, Volcanology, Petroleum Geology, Environmental Science, and related careers.

**N. Physics**

**1. Approval for proposed Environmental Science Track for the Physics Associate of Science.**

<b>PHYSICS-ENVIRONMENTAL SCIENCE TRACK RECOMMENDED COURSE SEQUENCE</b>		<b>Credit Hours</b>
<b>FIRST YEAR</b>		
<b>FALL</b>		
MATH 2413	Calculus I*	4
GEOL 1403	Physical Geology	4
ENGL 1301	Composition I	3
	Creative Arts Elective – Core Curriculum	3
<b>SPRING</b>		
ENGL 1302	Composition II – Rhetoric	3
CHEM 1411	General Chemistry I	4
MATH 2414	Calculus II	4
HIST 1301	United States History I or HIST 2327	3
<b>SUMMER</b>		
HIST 1302	United States History II or HIST 2328	3
<b>SECOND YEAR</b>		
<b>FALL</b>		
PHYS 2425	University Physics I	4
BIOL 1406	Biology for Science Majors I	4
GOVT 2305	Federal Government	3
	Social & Behavioral Science Elective – Core Curriculum (Recommended: PSYC 2301- General Psychology)	3
<b>SPRING</b>		
GOVT 2306	Texas Government	3
PHYS 2426	University Physics II	4
GEOL 1404	Historical Geology**	4
	Core Component Area Option	1-3
<b>SUMMER</b>		
	Language, Philosophy & Culture Elective	3
*For students to directly enroll into <b>MATH 2413</b> Calculus 1, they must earn a score of 980+ on the math portion of the TSIA2 Exam and successfully complete an exam administered by the MATH department.		
**GEOL 1404 Historical Geology is scheduled for 2 hours of field of study and 2 hours of general education requirements (Component Area Option)		

Justification: The proposed Environmental Science track will provide an academic path with strong credentials to the students interested in pursuing Environmental Science, Environmental Geology, and related careers.

## O. Physics

### 1. Approval for proposed Geoscience/Geo-Spatial Track for the Physics Associate of Science.

<b>PHYSICS-GEOSCIENCE/GEO-SPATIAL SCIENCE TRACK</b>		
<b>RECOMMENDED COURSE SEQUENCE</b>		
		<b>Credit Hours</b>
<b>FIRST YEAR</b>		
<b>FALL</b>		
MATH 2413	Calculus I	4
GEOL 1403	Physical Geology	4
ENGL 1301	Composition I	3
	Creative Arts Elective – Core Curriculum	3
<b>SPRING</b>		
ENGL 1302	Composition II – Rhetoric	3
CHEM 1411	General Chemistry I	4
MATH 2414	Calculus II	4
HIST 1301	United States History I or HIST 2327	3
<b>SUMMER</b>		
HIST 1302	United States History II or HIST 2328	3
<b>SECOND YEAR</b>		
<b>FALL</b>		
PHYS 2425	University Physics I	4
GEOL 1404	Historical Geology*	4
GOVT 2305	Federal Government	3
	Social & Behavioral Science Elective – Core Curriculum (Recommended: PSYC 2301- General Psychology)	3
<b>SPRING</b>		
GOVT 2306	Texas Government	3
PHYS 2426	University Physics II <b>OR</b> COSC 1436**	4
GEOL 1445	Oceanography <b>OR</b> GEOL 1447	4
	Core Component Area Option	1-3
<b>SUMMER</b>		
	Language, Philosophy & Culture Elective	3
<b>*GEOL 1404 Historical Geology is scheduled for 2 hours of field of study and 2 hours of general education requirements (Component Area Option)</b>		
<b>**Students should speak with an advisor and check with the institution they intend to transfer in order to choose the best option.</b>		

Justification: The proposed Geoscience track will provide an academic path with strong credentials to the students interested in pursuing Exploration Geology, Geo-spatial Technology, Natural Resources, and related careers.

## V. Next Meeting Date

Thursday, January 26, 2023 via Microsoft Teams.

## VI. Adjournment