

CYPRESS COLLEGE CURRICULUM COMMITTEE

Tuesday, November 20, 2018

TLC) Teaching Learning Center in the LRC.

3:00 p.m.

AGENDA

PLEASE BE ON TIME...The meeting will begin promptly at 3:00 p.m. in the **TLC) Teaching Learning Center in the LRC.** Your attendance is critical in helping to meet the curriculum needs of Cypress College. Remember if you are unable to attend please find an alternate representative.

Call to Order:

Silvie Grote, Chair

1. **Establish Quorum and Acknowledge Alternates**
2. **Adoption of the Agenda**
3. **Approval of November 6, 2018 minutes:** (attached)
4. **Public Commentary (3 minutes per speaker)**
5. **Chair Report**

NEW COURSES					
COURSE ID	ACTION TAKEN	CLASS SIZE	CLASS SIZE JUSTIFICATION	EFF DATE	JUSTIFICATION
ENGL 010LC Advanced English Skills Lab Units: .50 Lecture: 0 Laboratory: 1.50	* New Course * Corequisite: ENGL 100 C * Hybrid only * Pass/No Pass * Credit – Not Degree Applicable	27	This course requires one-on-one and a low instruction / student ratio.	2019 Fall	This course is geared toward students who have basic skills needs such that they need additional support in order to succeed in a transfer-level English course.
ENGT 103 C Introduction to Embedded Systems Units: 3 Lecture: 3 Laboratory: 1	* New Course * Prerequisite: None * Distance Education and Hybrid * CSU Transfer	25	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Fall	New course for new AS degree program in Mechatronics, Robotics and Automation.

ENGT 105 C Instrumentation and Process Control Units: 3 Lecture: 3 Laboratory: 1	* New Course * Corequisite: ENGT 103 C * Distance Education and Hybrid * CSU Transfer	25	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Fall	New course for new AS degree program in Mechatronics, Robotics and Automation.
ENGT 107 C Electricity and Electronics Units: 3 Lecture: 3 Laboratory: 2	* New Course * Prerequisite: None * Distance Education and Hybrid * CSU Transfer	25	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Fall	New course for new AS degree program in Mechatronics, Robotics and Automation.
ENGT 109 C Industrial Design and Graphics Units: 3 Lecture: 3 Laboratory: 3	* New Course * Prerequisite: None * Distance Education and Hybrid * CSU Transfer	25	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Fall	New course for new AS degree program in Mechatronics, Robotics and Automation.
ENGT 115 C Electric Motors and Controls Units: 3 Lecture: 3 Laboratory: 1	* New Course * Corequisites: ENGT 103 C and ENGT 107 C * Distance Education and Hybrid * CSU Transfer	25	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Fall	New course for new AS degree program in Mechatronics, Robotics and Automation.
ENGT 120 C Mechanical Systems Units: 3 Lecture: 3 Laboratory: 1	* New Course * Corequisites: ENGT 103 C and ENGT 105 C * Distance Education and Hybrid * CSU Transfer	25	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Fall	New course for new AS degree program in Mechatronics, Robotics and Automation.

ENGT 125 C Hydraulic and Pneumatic Systems Units: 3 Lecture: 3 Laboratory: 1	* New Course * Corequisites: ENGT 103 C and ENGT 105 C * Distance Education and Hybrid * CSU Transfer	25	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Fall	New course for new AS degree program in Mechatronics, Robotics and Automation.
ENGT 150 C Digital Fundamentals and PLC Programming Units: 4 Lecture: 4 Laboratory: 2	* New Course * Corequisites: ENGT 103 C and ENGT 107 C * Distance Education and Hybrid * CSU Transfer	25	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Fall	New course for new AS degree program in Mechatronics, Robotics and Automation.
ENGT 160 C Industrial Data Network and HMI Units: 3 Lecture: 3 Laboratory: 1	* New Course * Corequisites: ENGT 103 C and ENGT 150 C * Distance Education and Hybrid * CSU Transfer	25	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Fall	New course for new AS degree program in Mechatronics, Robotics and Automation.
ENGT 210 C Principles of Robotics Systems Units: 3 Lecture: 3 Laboratory: 1	* New Course * Corequisite: ENGT 103 C * Distance Education and Hybrid * CSU Transfer	25	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Fall	New course for new AS degree program in Mechatronics, Robotics and Automation.
ENGT 225 C Robot and Automation Programming Units: 3 Lecture: 3 Laboratory: 3	* New Course * Corequisites: ENGT 150 C and ENGT 160 C and ENGT 210 C * Distance Education and Hybrid * CSU Transfer	25	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Fall	New course for new AS degree program in Mechatronics, Robotics and Automation.

ENGT 240 C Advanced Robotics Units: 3 Lecture: 3 Laboratory: 1	* New Course * Corequisites: ENGT 109 C and ENGT 225 C * Distance Education and Hybrid * CSU Transfer	25	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Fall	New course for new AS degree program in Mechatronics, Robotics and Automation.
ENGT 250 C Industrial Maintenance and Safety Units: 3 Lecture: 3 Laboratory: 1	* New Course * Corequisites: ENGT 115 C and ENGT 120 C and ENGT 125 C * Distance Education and Hybrid * CSU Transfer	25	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Fall	New course for new AS degree program in Mechatronics, Robotics and Automation.
ENGT 255 C Integrated Automation Systems Units: 3 Lecture: 3 Laboratory: 1	* New Course * Corequisite: ENGT 160 C * Distance Education and Hybrid * CSU Transfer	25	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Fall	New course for new AS degree program in Mechatronics, Robotics and Automation.
ENGT 265 C Manufacturing Operation Management Units: 3 Lecture: 3 Laboratory: 1	* New Course * Corequisite: ENGT 109 C * Distance Education and Hybrid * CSU Transfer	25	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Fall	New course for new AS degree program in Mechatronics, Robotics and Automation.
ENGT 290 C Industry 4.0, IIoT, Digitalization Units: 3 Lecture: 3 Laboratory: 1	* New Course * Corequisites: ENGT 255 C and ENGT 265 C * Distance Education and Hybrid * CSU Transfer	25	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Fall	New course for new AS degree program in Mechatronics, Robotics and Automation.

MATH 011 C Skills for Finite Math Units: 2 Lecture: 2 Laboratory: 0	* New Course * Prerequisite: Appropriate placement * Corequisite: Concurrent enrollment in MATH 115 C * Distance Education and Hybrid * Pass/No Pass	30	Class time focuses on individualized instruction, student presentation time, and/or group learning.	2019 Fall	This course is needed for AB 705 implementation.
MATH 012 C Skills for Probability and Statistics Units: 2 Lecture: 2 Laboratory: 0	* New Course * Prerequisite: Appropriate placement * Corequisite: Concurrent enrollment in MATH 120 C * Distance Education and Hybrid * Pass/No Pass	30	Class time focuses on individualized instruction, student presentation time, and/or group learning.	2019 Fall	This course is needed for AB 705 implementation.
MATH 013 C Skills for Survey of Calculus Units: 2 Lecture: 2 Laboratory: 0	* New Course * Prerequisite: Appropriate placement * Corequisite: Concurrent enrollment in MATH 130 C * Distance Education and Hybrid * Pass/No Pass	30	Class time focuses on individualized instruction, student presentation time, and/or group learning.	2019 Fall	This course is needed as a corequisite to Math 130 C to support underprepared students who will enroll directly in Math 130 C as a result of AB 705.
MATH 014 C Skills for College Algebra Units: 2 Lecture: 2 Laboratory: 0	* New Course * Prerequisite: Appropriate placement * Corequisite: Concurrent enrollment in MATH 141 C * Distance Education and Hybrid * Pass/No Pass	30	Class time focuses on individualized instruction, student presentation time, and/or group learning.	2019 Fall	This course is needed for AB 705 implementation.

REACTIVATED COURSES					
COURSE ID	ACTION TAKEN	CLASS SIZE	CLASS SIZE JUSTIFICATION	EFF DATE	JUSTIFICATION
MATH 045 C Intermediate Algebra Review Units: 2 Lecture: 2 Laboratory: 0	<ul style="list-style-type: none"> * Catalog Description Update * Prerequisites revalidated * Distance Education and Hybrid * Pass/No Pass * Credit – Not Degree Applicable * TOPS & CIP Codes changed * Textbook Update * Student Learning Outcomes 	35	While the instructor does lecture, much of the class time focuses on discussion, group learning, and/or formal/informal student presentations. Evaluation primarily through objective exams. Writing assignments are assessed mostly for concepts and structure.	2019 Fall	This course is needed for AB 705 Implementation

REVISED COURSES					
COURSE ID	ACTION TAKEN	CLASS SIZE	CLASS SIZE JUSTIFICATION	EFF DATE	JUSTIFICATION
ENGL 060 C College Writing Preparation Units: 4 Lecture: 4 Laboratory: 0	<ul style="list-style-type: none"> * Outline Update * Catalog Description Update * Schedule Description Update * Prerequisite removed * Advisory language added * Grading Option changed to Pass/No Pass/Letter Grade Option * FSA C60 Reading added * Student Learning Outcomes * Textbook Update 	25	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Fall	Outline, catalog, schedule, and textbook updated to better reflect course content.
ENGL 100 C College Writing Units: 4 Lecture: 4 Laboratory: 0	<ul style="list-style-type: none"> * Outline Update * Catalog Description Update * Prerequisite changed * Advisory: ENGL 010LC added * Student Learning Outcomes * Textbook Update 	27	Evaluation mostly through writing assignments with a minimum of 6000-8000 words. Writing assignments are assessed for critical thinking, conceptual understanding, structure, style and mechanics.	2019 Fall	Outline, catalog, and textbook updated to better reflect course content.

ENGL 100HC Honors College Writing Units: 4 Lecture: 4 Laboratory: 0	* Outline Update * Catalog Description Update * Prerequisite changed * Advisory added ENGL 010LC * Student Learning Outcomes * Textbook Update	20	The Cypress College Honors Advisory Group recommends a maximum of 20 students for a seminar- style honors course to allow for in-depth class discussion and student presentations.	2019 Fall	Outline, catalog, and textbook updated to better reflect course content.
KIN 128 C Yoga-Intermediate Units: .50-1 Lecture: 0 Laboratory: 1.50-3	* FSA M35 Coaching added	30	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Spring	FSA was omitted during the last review
KIN 129 C Vinyasa Yoga Units: .50-1 Lecture: 0 Laboratory: 1.50-3	* FSA M35 Coaching added	30	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Spring	FSA was omitted during the last review
KIN 130 C Yoga Units: .50-1 Lecture: 0 Laboratory: 1.50-3	* FSA M35 Coaching added	30	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Spring	FSA was omitted during the last review
KIN 131 C Restorative Yoga Units: .50-1 Lecture: 0 Laboratory: 1.50-3	* FSA M35 Coaching added	30	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Spring	FSA was omitted during the last review

KIN 132 C Hatha Yoga Units: .50-1 Lecture: 0 Laboratory: 1.50-3	* FSA M35 Coaching added	30	Most of the time the students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instruction as the class proceeds.	2019 Spring	FSA was omitted during the last review
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NEW DEGREES/CERTIFICATES																																				
DEGREE		EFF DATE	JUSTIFICATION																																	
Engineering Technology	<p>Computer Aided Design Certificate</p> <p>Required courses are listed in suggested sequence:</p> <table border="1"> <thead> <tr> <th></th> <th></th> <th>Units</th> </tr> </thead> <tbody> <tr> <td>ENGR102 C</td> <td>Engineering Design Graphics</td> <td>3</td> </tr> <tr> <td>ENGR110 C</td> <td>Introduction to Engineering</td> <td>3</td> </tr> <tr> <td>ENGR205 C</td> <td>Advanced 3D Solid Modeling and Simulation</td> <td>3</td> </tr> <tr> <td>MATH142 C</td> <td>Trigonometry</td> <td>4</td> </tr> <tr> <td>ENGR220 C</td> <td>Programming and Problem-Solving in MATLAB</td> <td>3</td> </tr> <tr> <td colspan="2">Total Units</td> <td>16</td> </tr> </tbody> </table>			Units	ENGR102 C	Engineering Design Graphics	3	ENGR110 C	Introduction to Engineering	3	ENGR205 C	Advanced 3D Solid Modeling and Simulation	3	MATH142 C	Trigonometry	4	ENGR220 C	Programming and Problem-Solving in MATLAB	3	Total Units		16	2019 Fall	This is a new program aligned with need for skilled workforce in the field of advanced manufacturing and automation												
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Engineering Technology	<p>Mechatronics and Industrial Automation Certificate</p> <p>Required courses are listed in suggested sequence:</p> <table border="1"> <thead> <tr> <th></th> <th></th> <th>Units</th> </tr> </thead> <tbody> <tr> <td>ENGT103 C</td> <td>Introduction to Embedded Systems</td> <td>3</td> </tr> <tr> <td>ENGT105 C</td> <td>Instrumentation and Process Control</td> <td>3</td> </tr> <tr> <td>ENGT107 C</td> <td>Electricity and Electronics</td> <td>3</td> </tr> <tr> <td>ENGT109 C</td> <td>Industrial Design and Graphics</td> <td>3</td> </tr> <tr> <td>ENGT115 C</td> <td>Electric Motors and Controls</td> <td>3</td> </tr> <tr> <td>ENGT120 C</td> <td>Mechanical Systems</td> <td>3</td> </tr> <tr> <td>ENGT125 C</td> <td>Hydraulic and Pneumatic Systems</td> <td>3</td> </tr> <tr> <td>ENGT150 C</td> <td>Digital Fundamentals and PLC Programming</td> <td>4</td> </tr> <tr> <td>ENGT160 C</td> <td>Industrial Data Network and HMI</td> <td>3</td> </tr> <tr> <td colspan="2">Total Units</td> <td>28</td> </tr> </tbody> </table>			Units	ENGT103 C	Introduction to Embedded Systems	3	ENGT105 C	Instrumentation and Process Control	3	ENGT107 C	Electricity and Electronics	3	ENGT109 C	Industrial Design and Graphics	3	ENGT115 C	Electric Motors and Controls	3	ENGT120 C	Mechanical Systems	3	ENGT125 C	Hydraulic and Pneumatic Systems	3	ENGT150 C	Digital Fundamentals and PLC Programming	4	ENGT160 C	Industrial Data Network and HMI	3	Total Units		28	2019 Fall	Mechatronics/Industrial Automation is designed to prepare students for employment as entry-level industrial automation technicians. The program prepares students for careers in the design, operation, and maintenance of industrial automation systems focusing on the local industries that utilize these technologies, such as food production, petroleum production, fabrication, and logistics. This program focuses on the application of electronics and computer technology to industrial automation systems, including instrumentation and control, industrial robotics, and process control systems. Significant emphasis is placed on project-based learning facilitated by significant laboratory work.
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Engineering Technology	Robotics Technician Certificate		2019 Fall	The Robotics Certificate program provides a basic foundation of industrial robotics and how they can be used in a plant or manufacturing system. The simulation software, integrated within the program emulates real-world robotics applications and employs the basic principles common to the vast majority of robots currently in use in the automation industry including Cartesian and SCARA designs.	
	Required courses are listed in suggested sequence:				
		Units			
	ENGT103 C	Introduction to Embedded Systems			3
	ENGT115 C	Electric Motors and Controls			3
	ENGT120 C	Mechanical Systems			3
	ENGT125 C	Hydraulic and Pneumatic Systems			3
	ENGT210 C	Principles of Robotics Systems			3
	ENGT225 C	Robot and Automation Programming			3
	ENGT240 C	Advanced Robotics			3
Total Units		21			

REVISED DEGREES/CERTIFICATES					
DEGREE		EFF DATE	JUSTIFICATION		
Engineering Technology	Associate in Science Degree in Mechatronics, Robotics & Automation		2019 Fall	Due to recent changes within the industry and to sustain the quest for leadership through the creation of an "innovation economy" changes made to the program in order to train future workforces in a cooperative, active-learning environment.	
	Must take the required nine courses listed below in the suggested sequence (total of 28 units) plus choose one area of emphasis, (additional 9-12 units depending on emphasis selected).				
		Units			
	ENGT103 C	Introduction to Embedded Systems			3
	ENGT105 C	Instrumentation and Process Control			3
	ENGT107 C	Electricity and Electronics			3
	ENGT109 C	Industrial Design and Graphics			3
	ENGT115 C	Electric Motors and Controls			3
	ENGT120 C	Mechanical Systems			3
	ENGT125 C	Hydraulic and Pneumatic Systems			3
	ENGT150 C	Digital Fundamentals and PLC Programming			4
	ENGT160 C	Industrial Data Network and HMI			3
	Mechatronics and Robotics Operator Emphasis:				
		Units			
	ENGT210 C	Principles of Robotics Systems			3
	ENGT225 C	Robot and Automation Programming			3
	ENGT240 C	Advanced Robotics			3
	Mechatronics System Technician Emphasis:				Units
	ENGT250 C	Industrial Maintenance and Safety			3
	ENGT255 C	Integrated Automation Systems			3
ENGT265 C	Manufacturing Operation Management	3			
ENGT290 C	Industry 4.0, IIoT, Digitization	3			
Total Units		37 - 40			