

CYPRESS COLLEGE CURRICULUM COMMITTEE

Tuesday, September 15, 2015
(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:

Mark Majarian, Chair

1. **Approval of *September 8, 2015 minutes*:** (attached)
2. **Chair Report**
3. **Baccalaureate draft vote**

Approvals –

NEW COURSES					
COURSE ID	ACTION TAKEN	CLASS SIZE	CLASS SIZE JUSTIFICATION	EFF DATE	JUSTIFICATION
ECON 120 C International Economics Units:3 Lecture:3 Laboratory:0	* New Course * Prerequisite: Min grade of C in ECON 100 C * UC/CSU Transfer * AAGE: Area D * CSUGE: Area D2 * IGETC: Area 4B * Distance Education/Hybrid	45	The primary mode of instruction is lecture and may include discussion and/or group learning.	2016 Fall	New course for AAT
PE 126 C Sand Volleyball Beginning Units:1 Lecture:0 Laboratory:3	* New Course * Prerequisite: None * UC/CSU Transfer	30	Individualized Instruction/Group Learning/ Student Presentations-Class time focuses on individualized instruction, student presentation time, and/or group learning.	2016 Fall	ATT Kinesiology requirement (1 unit requirement)
PE 128 C Sand Volleyball - Intermediate/Advanced Units:1 Lecture:0 Laboratory:3	* New Course * Prerequisite: None * UC/CSU Transfer	30	Individualized Instruction/Group Learning/ Student Presentations-Class time focuses on individualized instruction, student presentation time, and/or group learning.	2016 Fall	ATT Kinesiology requirement (1 unit requirement)

PHOT 235 C Drone Photography & Video Units:3 Lecture:2 Laboratory:4	* New Course * Prerequisite: A minimum grade of C in PHOT 101 C; PHOT 103 C * CSU Transfer * Material Fee \$35	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.	2016 Fall	This course is part of a collaboration with the Aviation Department for our UAV Certification Program
PHOT 236 C UAV Flight Lab: Photography Units:2 Lecture:1 Laboratory:3	* New Course * Prerequisite: A minimum grade of C in PHOT 235 C * CSU Transfer * Material Fee \$35	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.	2016 Fall	This course is part of a collaboration with the Aviation Department for our UAV Certification Program

REVISED COURSES					
COURSE ID	ACTION TAKEN	CLASS SIZE	CLASS SIZE JUSTIFICATION	EFF DATE	JUSTIFICATION
AC/R 036 C Refrigerants, Charging & Recovery Units: 1 Lecture: .5 Laboratory: 1.5	* Textbook Update	20	HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.	2016 Fall	Program Review Textbook updated
AC/R 050 C HVAC/R Special Projects Units: .5-1 Lecture: 0 Laboratory: 1.5-3	* Outline Update * Advisory added AC/R 100 C * Class size from 25 to 20 * Textbook Update	20	HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.	2016 Fall	Program Review Outline & textbook updated to better reflect course content.

AC/R 055 C Technician Customer Relations Units: 2 Lecture: 1.5 Laboratory: 1.5	* Textbook Update * Class size from 25 to 20 * FSAs added A35 Business, B90 Management	20	HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.	2016 Fall	Program Review Textbook updated
AC/R 100 C Principles of Thermal Dynamics and Heat Transfer Units: 3 Lecture: 1.5 Laboratory: 4.5	* Title change * Advisory revalidated * Textbook Update	20	HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.	2016 Fall	Program Review Title & textbook updated to better reflect course content.
AC/R 105 C Electricity for Air Conditioning and Refrigeration I Units: 3 Lecture: 1.5 Laboratory: 4.5	* Title change * Textbook Update	20	HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.	2016 Fall	Program Review Title & textbook updated to better reflect course content.
AC/R 106 C Electricity for Air Conditioning and Refrigeration II Units: 3 Lecture: 1.5 Laboratory: 4.5	* Prerequisite revalidated * Title expanded * Textbook Update	20	HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.	2016 Fall	Program Review Title &Textbook updated to better reflect course content.

AC/R 110 C Air Conditioning I Units: 3 Lecture: 1.5 Laboratory: 4.5	* Textbook Update * Class size from 25 to 20	20	HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.	2016 Fall	Program Review Textbook updated
AC/R 125 C Boiler and Hydronic Heating Units: 2 Lecture: 1.5 Laboratory: 1.5	* Textbook Update	20	HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.	2016 Fall	Program Review Textbook updated
AC/R 135 C Solar Energy for Heat and Cool Units: 2 Lecture: 1.5 Laboratory: 1.5	* Textbook Update	20	HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.	2016 Fall	Program Review Textbook updated
AC/R 140 C Plumbing Principles/Practices Units: 4 Lecture: 3 Laboratory: 3	* Outline Update * Textbook Update * Class size from 24 to 20	20	HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.	2016 Fall	Program Review Outline & textbook updated to better reflect course content.

<p>AC/R 145 C Load Calculations for Heating and Cooling Units: 2 Lecture: 1.5 Laboratory: 1.5</p>	<p>* Prerequisite revalidated * Textbook Update * Class size from 25 to 20</p>	<p>20</p>	<p>HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.</p>	<p>2016 Fall</p>	<p>Program Review Textbook updated</p>
<p>AC/R 205 C Commercial Air Conditioning Units: 3 Lecture: 1.5 Laboratory: 4.5</p>	<p>* Outline Update * Textbook Update * Advisory change to Prerequisite AC/R 105 C * Prerequisite added AC/R 100 C</p>	<p>20</p>	<p>HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.</p>	<p>2016 Fall</p>	<p>Program Review Outline & textbook updated to better reflect course content.</p>
<p>AC/R 210 C Commercial Refrigeration Units: 3 Lecture: 1.5 Laboratory: 4.5</p>	<p>* Outline Update * Textbook Update * Advisory change to Prerequisite AC/R 100 C * Prerequisite added AC/R 105 C</p>	<p>20</p>	<p>HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.</p>	<p>2016 Fall</p>	<p>Program Review Outline & textbook updated to better reflect course content.</p>
<p>AC/R 215 C Codes and Estimating for HVACR Units: 3 Lecture: 1.5 Laboratory: 4.5</p>	<p>* Outline Update * Title change * Advisory change from AC/R 105 C to AC/R 137 C * Textbook Update</p>	<p>20</p>	<p>HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.</p>	<p>2016 Fall</p>	<p>Program Review Outline, title & textbook updated to better reflect course content.</p>

<p>AC/R 220 C A/C Controls and Energy Management Units: 4 Lecture: 3 Laboratory: 3</p>	<p>* Outline Update * Title change * Advisory change from MATH 020C, AC/R 111 C & AC/R 112 C to AC/R 105 C * Textbook Update</p>	<p>20</p>	<p>HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.</p>	<p>2016 Fall</p>	<p>Program Review Outline, title & textbook updated to better reflect course content.</p>
<p>AC/R 225 C Green A/C and Auditing Units: 2 Lecture: 1.5 Laboratory: 1.5</p>	<p>* Outline Update * Advisory AC/R 105 C revalidated and added AC/R 100 C * Textbook Update</p>	<p>20</p>	<p>HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.</p>	<p>2016 Fall</p>	<p>Program Review Outline & textbook updated to better reflect course content.</p>
<p>AC/R 230 C Heat Pumps Units: 2 Lecture: 1.5 Laboratory: 1.5</p>	<p>* Prerequisites revalidated * Textbook Update</p>	<p>20</p>	<p>HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.</p>	<p>2016 Fall</p>	<p>Program Review Textbook updated</p>
<p>AC/R 235 C Air Conditioning Capstone Units: 2 Lecture: 1.5 Laboratory: 1.5</p>	<p>* Advisories revalidated * Textbook Update * Class size from 25 to 20</p>	<p>20</p>	<p>HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care.</p>	<p>2016 Fall</p>	<p>Program Review Textbook updated</p>

<p>AC/R 240 C Green Refrigeration and Auditing Units: 2 Lecture: 1.5 Laboratory: 1.5</p>	<p>* Outline Update * Title change * Advisory AC/R 100 C revalidated & AC/R 105 added * Textbook Update</p>	<p>20</p>	<p>HVAC EXCELLENCE Standard 5.2 –Classes should consist of no more than a maximum of 20 students per instructor. This standard is not only for the quality of education allowing for more individual instruction, but also takes into account safety and health reasons as this industry is involved with the handling of hazardous materials such as refrigerants, oxygen and acetylene and oils. Also, the handling of electrical circuits at higher voltages demands more care</p>	<p>2016 Fall</p>	<p>Program Review Outline, title & textbook updated to better reflect course content.</p>
<p>ACR 055 C Automotive Collision - Work Experience - Vocational Units: 1-4 Lecture: 1 Laboratory: 0</p>	<p>* Outline Update * Catalog Description Update * Schedule Description Update * Title change * Prerequisite revalidated * Textbook Update</p>	<p>28</p>	<p>Most of the time students are engaged in practicing the skill(s) they are learning and the instructor gives each student individual instructions as the class proceeds.</p>	<p>2016 Fall</p>	<p>Program Review Outline, title, catalog, schedule & textbook updated to better reflect course content.</p>
<p>AT 102 C Automotive History Units: 3 Lecture: 3 Laboratory: 0</p>	<p>* Outline Update * Add Distance Education * Class Size from 25 to 35</p>	<p>35</p>	<p>While the instructor does lecture, much of the class time focuses on discussion, group learning, and/or formal/informal student presentations.</p>	<p>2016 Fall</p>	<p>Outline updated to better reflect course content. Online component requested to increase the distance education offerings at Cypress College, to increase student access and meet student demands.</p>
<p>AT 110 C Introduction to Automotive Technology Units: 4 Lecture: 3 Laboratory: 3</p>	<p>* Outline Update * Catalog Description Update * Schedule Description Update * Title change * Textbook Update * \$30.00 materials fee added</p>	<p>24</p>	<p>Automotive technology courses at Cypress College involve lecture/ individualized instruction and lab that involves extensive individualized feedback to develop vocational skills. With extensive involvement with our advisory committees (both general automotive and Toyota) the recommendation was to follow the industry standard of 12:1. While this is not feasible in our educational model, the student to instructor ratio of 24:1 allows us to maintain a safe working environment by creating collaborative work groups of 4.</p>	<p>2016 Fall</p>	<p>Program Review Outline, title, catalog, schedule & textbook updated to reflect current technology and realignment to automotive courses</p>

<p>AT 120 C Auto Engine Repair/Machining Units: 12 Lecture: 9 Laboratory: 9</p>	<p>* Outline Update * Prerequisite change to min grade of "C" in AT 105 C & AT 109 C or AT 110 C * Textbook Update</p>	<p>24</p>	<p>Automotive technology courses at Cypress College involve lecture/ individualized instruction and lab that involves extensive individualized feedback to develop vocational skills. With extensive involvement with our advisory committees (both general automotive and Toyota) the recommendation was to follow the industry standard of 12:1. While this is not feasible in our educational model, the student to instructor ratio of 24:1 allows us to maintain a safe working environment by creating collaborative work groups of 4.</p>	<p>2016 Fall</p>	<p>Program Review Outline and textbooks updated to reflect current technology and realignment to automotive courses. The prerequisites were incorrectly created. There should be two prerequisites; AT 109 or AT 110 and AT 105</p>
<p>AT 195 C Automotive Service Advisor Units: 4 Lecture: 3 Laboratory: 3</p>	<p>* Advisory revalidated * Textbook Update</p>	<p>24</p>	<p>Automotive technology courses at Cypress College involve lecture/ individualized instruction and lab that involves extensive individualized feedback to develop vocational skills. With extensive involvement with our advisory committees (both general automotive and Toyota) the recommendation was to follow the industry standard of 12:1. While this is not feasible in our educational model, the student to instructor ratio of 24:1 allows us to maintain a safe working environment by creating collaborative work groups of 4.</p>	<p>2016 Fall</p>	<p>Program Review Outline and textbooks updated to reflect current industry input.</p>
<p>AT 200 C Electronic/Electrical Diagnostics Units: 12 Lecture: 9 Laboratory: 9</p>	<p>* Outline Update * Catalog Description Update * Schedule Description Update * Title change * Prerequisite change from AT 105 to AT 109 and AT 110 * Advisory Deleted * Textbook Update * Fee increase from \$30 to \$75</p>	<p>24</p>	<p>Automotive technology courses at Cypress College involve lecture/ individualized instruction and lab that involves extensive individualized feedback to develop vocational skills. With extensive involvement with our advisory committees (both general automotive and Toyota) the recommendation was to follow the industry standard of 12:1. While this is not feasible in our educational model, the student to instructor ratio of 24:1 allows us to maintain a safe working environment by creating collaborative work groups of 4.</p>	<p>2016 Fall</p>	<p>Outline, title, catalog, schedule & textbook updated to better reflect course content. Update content to current industry requirements based on General and Toyota T- TEN Advisory Council's input.</p>

AT 209 C Toyota Portfolio TPORT Units: 1 Lecture: 1 Laboratory: 0	* Prerequisite: AT 109 C or consent of Toyota T-Ten Coordinator	35	Class time focuses on individualized work plans. Student work in groups to develop presentations/projects for evaluation. Discussion of requirements of Toyota TTEN program and planning continue throughout the course	2016 Fall	Prerequisite added for Program development
AT 215 C ASE Test Prep - Heating and A/C Units: .5 Lecture: .5 Laboratory: 0	* Outline Update * Catalog Description Update * Schedule Description Update * Class size from 24 to 35 * Remove Distance Education	35	While the instructor does lecture, much of the class time focuses on discussion, group learning, and/or formal/informal student presentations.	2016 Fall	Outline, catalog, schedule updated to better reflect course content. This course is being revised to reflect current NATEF and ASE standards
AT 225 C ASE Test Prep - Engine Repair Units: .5 Lecture: .5 Laboratory: 0	* Outline Update * Class size from 24 to 35	35	While the instructor does lecture, much of the class time focuses on discussion, group learning, and/or formal/informal student presentations.	2016 Fall	Outline updated to better reflect course content. This course is being revised to NATEF and ASE standards
AT 235 C ASE Test Prep - Brakes Units: .5 Lecture: .5 Laboratory: 0	* Outline Update * Class size from 24 to 35 * Remove Distance Education	35	While the instructor does lecture, much of the class time focuses on discussion, group learning, and/or formal/informal student presentations.	2016 Fall	Outline updated to better reflect course content. This course is being revised to reflect current NATEF and ASE standards
AT 236 C ASE Test Prep - Steering/Suspension Units: .5 Lecture: .5 Laboratory: 0	* Outline Update * Class size from 24 to 35 * Remove Distance Education	35	While the instructor does lecture, much of the class time focuses on discussion, group learning, and/or formal/informal student presentations.	2016 Fall	Outline updated to better reflect course content. This course is being revised to reflect current ASE and NATEF standards
AT 245 C ASE Test Prep - Manual Transmission Units: .5 Lecture: .5 Laboratory: 0	* Outline Update * Class size from 24 to 35 * Remove Distance Education	35	While the instructor does lecture, much of the class time focuses on discussion, group learning, and/or formal/informal student presentations.	2016 Fall	Outline updated to better reflect course content. This course is being revised to reflect NATEF and ASE standards

AT 246 C ASE Test Prep- Automatic Transmission Units: .5 Lecture: .5 Laboratory: 0	* Outline Update * Title expanded * Class size from 24 to 35 * Remove Distance Education	35	While the instructor does lecture, much of the class time focuses on discussion, group learning, and/or formal/informal student presentations.	2016 Fall	Outline updated to better reflect course content. This course is being revised to reflect NATEF and ASE standards
AT 250 C Advanced Performance/ Driveability Units: 4 Lecture: 4 Laboratory: 2	* Outline Update * \$30 Material Fee * Prerequisite: Completion of or concurrent enrollment in AT 105 C and AT 110 C with a minimum grade of "C" * Textbook Update	24	Automotive technology courses at Cypress College involve lecture/ individualized instruction and lab that involves extensive individualized feedback to develop vocational skills. With extensive involvement with our advisory committees (both general automotive and Toyota) the recommendation was to follow the industry standard of 12:1. While this is not feasible in our educational model, the student to instructor ratio of 24:1 allows us to maintain a safe working environment by creating collaborative work groups of 4.	2016 Fall	Outline and textbook updated to better reflect course content This course is being revised to reflect current technology
AT 255 C ASE Test Prep - Engine Performance Units: .5 Lecture: .5 Laboratory: 0	* Outline Update * Class size from 24 to 35 * Remove Distance Education	35	While the instructor does lecture, much of the class time focuses on discussion, group learning, and/or formal/informal student presentations.	2016 Fall	Outline updated to better reflect course content. This course is being revised to reflect NATEF and ASE standards
AT 256 C ASE Test Prep – Advanced Engine Performance Units: .5 Lecture: .5 Laboratory: 0	* Outline Update * Class size from 24 to 35 * Remove Distance Education	35	While the instructor does lecture, much of the class time focuses on discussion, group learning, and/or formal/informal student presentations.	2016 Fall	Outline updated to better reflect course content. This course is being revised to reflect NATEF and ASE standards
AT 265 C ASE Test Prep - Electrical Units: .5 Lecture: .5 Laboratory: 0	* Outline Update * Class size from 24 to 35 * Remove Distance Education	35	While the instructor does lecture, much of the class time focuses on discussion, group learning, and/or formal/informal student presentations.	2016 Fall	Outline updated to better reflect course content. This course is being revised to reflect NATEF and ASE standards

<p>AT 280 C Introduction to Alternative Fuels Units: 4 Lecture: 3 Laboratory: 3</p>	<p>* Outline Update * Course number change from AT 180 to AT 280 * Lab hours from 1 to 3 * Units from 3 to 4 * Catalog Description Update * Schedule Description Update</p>	<p>24</p>	<p>Automotive technology courses at Cypress College involve lecture/ individualized instruction and lab that involves extensive individualized feedback to develop vocational skills. With extensive involvement with our advisory committees (both general automotive and Toyota) the recommendation was to follow the industry standard of 12:1. While this is not feasible in our educational model, the student to instructor ratio of 24:1 allows us to maintain a safe working environment by creating collaborative work groups of 4.</p>	<p>2016 Fall</p>	<p>Outline, catalog, schedule, units, lab hours, course number, updated to better reflect course content.</p>
<p>AT 281 C Introduction to Electric/Hybrid Vehicles Units: 4 Lecture: 3 Laboratory: 3</p>	<p>* Outline Update * Course number change from AT 181 to AT 281 * Lecture hours from 2 to 3 * Lab hours from 1 to 3 * Units from 2 to 4 * Prerequisite: A minimum grade of “B” in AT 105 C and AT 110 C</p>	<p>24</p>	<p>Automotive technology courses at Cypress College involve lecture/ individualized instruction and lab that involves extensive individualized feedback to develop vocational skills. With extensive involvement with our advisory committees (both general automotive and Toyota) the recommendation was to follow the industry standard of 12:1. While this is not feasible in our educational model, the student to instructor ratio of 24:1 allows us to maintain a safe working environment by creating collaborative work groups of 4.</p>	<p>2016 Fall</p>	<p>Outline, units, lecture & lab hours, course number, updated to better reflect course content. Update the course to reflect current relevant industry standards based on NATEF standards and Advisory Council recommendations</p>
<p>AT 295 C Automotive Internship Units: 4 Lecture: 1 Laboratory: 15</p>	<p>* Outline Update * Lab hours from 3.40-13.40 to 15 * Units from 1-4 to 4 * Catalog Description Update * Schedule Description Update * Prerequisite: Completion of at least one of the Automotive Technology Technician certificates * Distance Education added * Textbook Update</p>	<p>25</p>	<p>Classes in which the instructor coordinates internship/field practice opportunities and supervises students individually at different locations.</p>	<p>2016 Fall</p>	<p>Program Review. Outline, catalog, schedule, textbook, units, lab hours, course number, updated to better reflect course content. Online component requested to increase the distance education offerings at Cypress College, to increase student access and meet student demands.</p>

NEW DEGREES/CERTIFICATES					
DEGREE		EFF DATE	JUSTIFICATION		
Air Conditioning/ Refrigeration	Electrical Systems Core Certificate		2016 Fall	This certificate is being sought to align our certificates with the established Sophomore course sequence.	
	Required course are listed in suggested sequence				
		Units			
	AC/R036 C	Refrigerants, Charging and Recovery			1
	AC/R055 C	Technician Customer Relations			2
	AC/R105 C	Electricity for Air Conditioning and Refrigeration I			3
	AC/R115 C	Gas Heating and Carbon Monoxide			2
	AC/R125 C	Boiler and Hydronic Heating			2
	AC/R135 C	Solar Energy for Heat and Cool			2
		Total Units			12
Air Conditioning/ Refrigeration	Mechanical Systems Core Certificate		2016 Fall	This certificate is being sought to align our certificates with the existing Sophomore course sequence.	
	Required course are listed in suggested sequence				
		Units			
	AC/R035 C	Building Commissioning			2
	AC/R100 C	Principles of Thermal Dynamics and Heat Transfer			3
	AC/R110 C	Air Conditioning I			3
	AC/R120 C	Piping Practice, Tools and Safety			2
	AC/R137 C	Blueprints and Dimension Analysis			2
		Total Units			12
	Aviation and Travel Careers	UAV/UAS Advanced Certificate			2016 Fall
Required courses are listed in numeric sequence:					
		Units			
ATC102 C		Career Communication/Portfolio	3		
ATC132 C		Private Pilot	4		
ATC136 C		Air Navigation	3		
ATC140 C		Meteorology	3		
ATC144 C		Aircraft and Engines	3		
ATC160 C		UAV/UAS Basic	3		
ATC161 C		UAV/UAS Basic Simulator	1		
ATC162 C		UAV/UAS Basic Flight	2		
ATC197 C		Flight Simulator Instrument	1		
ATC232 C		Instrument Rating	3		
ATC256 C		Crew Resource Management	3		
ATC260 C		UAV/UAS Advanced	3		
ATC261 C		UAV/UAS Advanced Simulator	1		
ATC262 C		UAV/UAS Advanced Flight	2		
	Total Units	35			

Aviation and Travel Careers	<p>Associate in Science Degree UAV/UAS</p> <p>Required courses are listed in numeric sequence:</p> <table border="1" data-bbox="443 191 1149 758"> <thead> <tr> <th></th> <th></th> <th>Units</th> </tr> </thead> <tbody> <tr> <td>ATC102 C</td> <td>Career Communication/Portfolio</td> <td>3</td> </tr> <tr> <td>ATC132 C</td> <td>Private Pilot</td> <td>4</td> </tr> <tr> <td>ATC136 C</td> <td>Air Navigation</td> <td>3</td> </tr> <tr> <td>ATC140 C</td> <td>Meteorology</td> <td>3</td> </tr> <tr> <td>ATC144 C</td> <td>Aircraft and Engines</td> <td>3</td> </tr> <tr> <td>ATC160 C</td> <td>UAV/UAS Basic</td> <td>3</td> </tr> <tr> <td>ATC161 C</td> <td>UAV/UAS Basic Simulator</td> <td>1</td> </tr> <tr> <td>ATC162 C</td> <td>UAV/UAS Basic Flight</td> <td>2</td> </tr> <tr> <td>ATC197 C</td> <td>Flight Simulator Instrument</td> <td>1</td> </tr> <tr> <td>ATC232 C</td> <td>Instrument Rating</td> <td>3</td> </tr> <tr> <td>ATC256 C</td> <td>Crew Resource Management</td> <td>3</td> </tr> <tr> <td>ATC260 C</td> <td>UAV/UAS Advanced</td> <td>3</td> </tr> <tr> <td>ATC261 C</td> <td>UAV/UAS Advanced Simulator</td> <td>1</td> </tr> <tr> <td>ATC262 C</td> <td>UAV/UAS Advanced Flight</td> <td>2</td> </tr> <tr> <td colspan="2">Total Units</td> <td>35</td> </tr> </tbody> </table>			Units	ATC102 C	Career Communication/Portfolio	3	ATC132 C	Private Pilot	4	ATC136 C	Air Navigation	3	ATC140 C	Meteorology	3	ATC144 C	Aircraft and Engines	3	ATC160 C	UAV/UAS Basic	3	ATC161 C	UAV/UAS Basic Simulator	1	ATC162 C	UAV/UAS Basic Flight	2	ATC197 C	Flight Simulator Instrument	1	ATC232 C	Instrument Rating	3	ATC256 C	Crew Resource Management	3	ATC260 C	UAV/UAS Advanced	3	ATC261 C	UAV/UAS Advanced Simulator	1	ATC262 C	UAV/UAS Advanced Flight	2	Total Units		35	2016 Fall	This degree is part of a new UAV / UAS certificate/degree program being proposed in response to the 2014 Advisory Board recommendations and in coordination with CTE Enhancement Funding
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Economics	<p>Associate in Arts in Economics for Transfer Degree (AA-T)</p> <p>Required Core Courses (14 units): List A: Select One Course (3-4 units)</p> <table border="1" data-bbox="446 220 1136 625"> <thead> <tr> <th></th> <th></th> <th>Units</th> </tr> </thead> <tbody> <tr> <td>ECON100 C</td> <td>Principles of Economics-Macro</td> <td>3</td> </tr> <tr> <td></td> <td>or</td> <td></td> </tr> <tr> <td>ECON100HC</td> <td>Honors Principles of Economics</td> <td>3</td> </tr> <tr> <td>ECON105 C</td> <td>Principles of Economics-Micro</td> <td>3</td> </tr> <tr> <td></td> <td>or</td> <td></td> </tr> <tr> <td>ECON105HC</td> <td>Honors Principles of Economics</td> <td>3</td> </tr> <tr> <td>MATH120 C</td> <td>Introduction to Probability and Statistics</td> <td>4</td> </tr> <tr> <td>MATH130 C</td> <td>Survey of Calculus</td> <td>4</td> </tr> <tr> <td></td> <td>or</td> <td></td> </tr> <tr> <td>MATH150AC</td> <td>Calculus I</td> <td>4</td> </tr> </tbody> </table> <p>List B: Select One Course (3-4 units) or any course not used in List A</p> <table border="1" data-bbox="446 682 1136 955"> <thead> <tr> <th></th> <th></th> <th>Units</th> </tr> </thead> <tbody> <tr> <td>MATH115 C</td> <td>Finite Mathematics</td> <td>4</td> </tr> <tr> <td>MATH150BC</td> <td>Calculus II</td> <td>4</td> </tr> <tr> <td>ACCT101 C</td> <td>Financial Accounting</td> <td>4</td> </tr> <tr> <td>ACCT102 C</td> <td>Managerial Accounting</td> <td>4</td> </tr> <tr> <td>CIS111 C</td> <td>Computer Information Systems</td> <td>3</td> </tr> <tr> <td>MGT211 C</td> <td>Writing for Business</td> <td>3</td> </tr> </tbody> </table> <table border="1" data-bbox="446 982 1136 1312"> <thead> <tr> <th></th> <th></th> <th>Units</th> </tr> </thead> <tbody> <tr> <td>ECON110 C</td> <td>Survey of Economics</td> <td>3</td> </tr> <tr> <td></td> <td>or</td> <td></td> </tr> <tr> <td>ECON120 C</td> <td>International Economics</td> <td>3</td> </tr> <tr> <td></td> <td>or</td> <td></td> </tr> <tr> <td>ECON130 C</td> <td>Consumer Economics</td> <td>3</td> </tr> <tr> <td></td> <td>or</td> <td></td> </tr> <tr> <td>MATH250AC</td> <td>Multivariable Calculus</td> <td>4</td> </tr> <tr> <td>Total Units</td> <td></td> <td>20 - 22</td> </tr> </tbody> </table>			Units	ECON100 C	Principles of Economics-Macro	3		or		ECON100HC	Honors Principles of Economics	3	ECON105 C	Principles of Economics-Micro	3		or		ECON105HC	Honors Principles of Economics	3	MATH120 C	Introduction to Probability and Statistics	4	MATH130 C	Survey of Calculus	4		or		MATH150AC	Calculus I	4			Units	MATH115 C	Finite Mathematics	4	MATH150BC	Calculus II	4	ACCT101 C	Financial Accounting	4	ACCT102 C	Managerial Accounting	4	CIS111 C	Computer Information Systems	3	MGT211 C	Writing for Business	3			Units	ECON110 C	Survey of Economics	3		or		ECON120 C	International Economics	3		or		ECON130 C	Consumer Economics	3		or		MATH250AC	Multivariable Calculus	4	Total Units		20 - 22	2016 Fall	<p>This program is being created to meet the scholarly interests of students who would like to focus primarily on earning a bachelor's degree in Economics or a related subject. The courses for an AA-T in Economics are articulated with the CSU Long Beach: 372 -- "International Economics" an Upper Division Course with ECON 120C -- "International Economics" CSU Fullerton: ECON335 - - "The International Economy" an Upper Division Course with "ECON 120C -- International Economics" UC Santa Cruz: 140 -- "International Trade" at LL and UL with ECON 120C -- "International Economics"</p>
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