Required terms of enrollment verified by Kathlen Lee in an email on 4/13/2016.
New concentration code: AGRT

IRAO OFFICE USE ONLY	
Received	4/5/2016
In Banner	
MTVCOMP/Codeset	
Master Curriculum	
CIP Code	47.0614
Program Code	CA-AMT-AGRT
Program Description	CA-AMT-Automotive Green Tech

University of Hawai'i
Code Request Form for Academic Programs for

NEW OR MODIFY
PROGRAM CODE

Reset Form

☑ **New Program Code**   ☐ **Modify Program Code**   Date: 2/4/2016

REQUESTOR CONTACT INFORMATION

Name	Kathlen Lee	Campus	Kauai CC
Title	Educational Specialist	Email	kathlen@hawaii.edu
Office/Dept	Academic Affairs	Phone	808-245-8204

NEW PROGRAM CODE TO CREATE

Institution	KAU - Kauai CC	Campus	KAU - Kauai CC
Level	UG - Undergraduate	Effective Term	Fall 2016

	Code (Max. Characters)		Description	Check if requesting new code:
College	(2)	IN	Instructional	☐ See Banner form STVCOLL
Department	(4)	TR	Trade Technology	☐ See Banner form STVDEPT
Degree/Certificate	(6)	CA	Certificate of Achievement	☐ See Banner form STVDEGC
Major	(4)	AMT	Automotive Technology	☐ See Banner form STVMAJR
Concentration	(4)	AGRT	Automotive Green Technology	☐ See Banner form STVMAJR
Minor	(4)			☐ See Banner form STVMAJR

If a similar major/concentration code exists in Banner, please list the code: _____

Justification to warrant a new major/concentration code similar to an existing major/concentration code:

Is this major/concentration code being used the same way at the other UH campuses?	☐ Yes	☑ No
Should this program be available for applicants to select as their planned course of study on the online application? *If yes, student may select the code as their only program of study.*	☑ Yes	☐ No

RULES PERTAINING TO FINANCIAL AID AND 150% DIRECT SUBSIDIZED LOAN LIMIT LEGISLATION

Is 50% or greater of the classes in this program offered at a location other than the Home Campus?	☐ Yes	☑ No
Is this program/major/certificate financial aid eligible?	☑ Yes	☐ No
Does this certificate qualify as a Gainful Employment Program (Title IV-eligible certificate program)?	☑ Yes	☐ No

See http://www.ifap.ed.gov/GainfulEmploymentInfo/index.html

Program Length
In academic years; decimals are acceptable. The length of the program should match what is published by the campus in any online and/or written publication.   1 year

Special Program Designations
See Special Program Designations Code Definitions on IRAO Program Code Request webpage

☐ A   ☐ B   ☑ N   ☐ P   ☐ T   ☐ U

Required Terms of Enrollment: ☐ Fall   ☐ Spring   ☐ Summer   ☐ Extended

Page **1** of **2**

ADDITIONAL COMMENTS

Requesting to add a new certificate of achievement track to the Automotive Technology program.

ATTACHMENTS

BOR Approved: Associate, Bachelor and Graduate Degrees, and sole credential certificates

☐ BOR Meeting Minutes & Supporting Documents   ☐ Curriculum

Chancellor Approved: Certificates related to authorized BOR program & Associate in Technical Studies (ATS) Degree

☑ Memo from Chancellor to notify VPAA about new program   ☑ Curriculum

For new certificates approved by the Chancellor, the related BOR authorized academic program is:
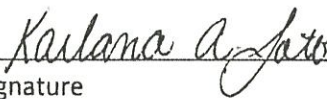Automotive Technology

VERIFICATIONS

By signing below, I verify that I have reviewed and confirm the above information that is pertinent to my position.

Registrar:

Kailana Soto

Print Name   Signature   2/24/16   Date

Financial Aid Officer:

Jeff Anderson

Print Name   Signature   3/2/16   Date
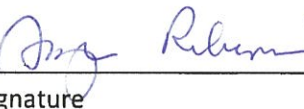
For Community Colleges, verification of consultation with OVPCC Academic Affairs:

Suzette Robinson

Print Name   Signature   3/17/16   Date

UNIVERSITY of HAWAI'I

KAUA'I
COMMUNITY COLLEGE
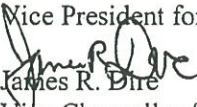
March 3, 2016

MEMORANDUM

TO: Risa E. Dickson
            Vice President for Academic Affairs

VIA: James R. Dire
            Vice Chancellor for Academic Affairs

FROM: Helen A. Cox
            Chancellor

SUBJECT: Curriculum Approval

I have approved the following on 1/4/2016 effective Fall 2016.

New

Automotive Technology:
Certificate of Competence (C.O.) – HEV Diagnostic and Repair
Certificate of Competence (C.O.) – HEV Preventive Maintenance and Repair
Certificate of Achievement (C.A.) – Driveability Technician
Certificate of Achievement (C.A.) – Heavy Line Technician
Certificate of Achievement (C.A.) – Automotive Green Technology

Fitness Professional:
Academic Subject Certificate (A.S.C.) – Fitness Professional

Geographic Information Systems:
Certificate of Competence (C.O.) – Geographic Information Systems
Certificate of Competence (C.O.) – Advanced Geographic Information Systems

Natural Science (Associate in Science):
Concentration – Pre-Engineering*
        *This program is effective Spring 2016.

Program certificate/title change
Automotive Technology:
Certificate of Achievement (C.A.) – Electronics/Computer Control Specialist (previously Certificate of Competence)

Certificate of Achievement (C.A.) – Master Automobile Service Technology (previously Automotive Technology)

Removal of certificate/program
Natural Science (Associate in Science):
Concentration – Plant Biology and Tropical Agriculture

kl

c   Division Chairs
        Tammie Napoleon
        Gordon Talbo
        Brian Yamamoto

VCAA Office Use Only	
Effective Fall	2016
Date Approved	
Replaces	

1. Type of Program Action: ☐ New ☒ Modification ☐ Deletion

PRESENT	Drive Train Specialist CO	Engine Specialist CO	Undercar Specialist CO	Electronics/Computer Control Specialist CO	AMT CA	AMT AAS Degree	PROPOSED	Drive Train Specialist CO	Engine Specialist CO	Undercar Specialist CO	HEV Diagnostic and Repair CO	HEV Preventive Maintenance and Repair CO	Automotive Green Technology CA	Electronics/Computer Control Technician CA	Heavy Line Technician CA	Driveability Technician CA	Master Automobile Service Technology CA	AMT AAS Degree
Semester 1	CO	CO	CO	CO	CA	AAS	**Semester 1**	CO	CO	CO	CO	CO	CA	CA	CA	CA	CA	AAS
AMT 20	2	2	2		2	2	AMT 20	2	2	2					2		2	2
AMT 40E	4	4	4	4	4	4	AMT 40E	4	4	4	4	4	4	4	4	4	4	4
AMT 53			3		3	3	AMT 53			3					3		3	3
AMT 55			4		4	4	AMT 55			4					4		4	4
Natural Environment: PHYS 101						3	Natural Environment: PHYS 101											3
Thinking, Reasoning/Mathematics: MATH 100						3	Thinking, Reasoning/Mathematics: Core Options											3
Semester 2							**Semester 2**											
AMT 30		6			6	6	AMT 30		6			6	6		6	6	6	6
AMT 40G				3	3	3	AMT 40G							3		3	3	3
AMT 46	4				4	4	AMT 46	4									4	4
ETRO 18				3		3	ETRO 18				3	3	3	3				3
Semester 3							**Semester 3**											
AMT 40B				3	3	3	AMT 40B							3	3	3	3	3
AMT 40D				3	3	3	AMT 40D							3	3	3	3	3
AMT 41				2	2	2	AMT 41							2	2	2	2	2
AMT 50					4	4	AMT 50							4			4	4
							AMT 171				3	3	3					
Cultural Environment: Core Options						3	Cultural Environment: Core Options											3
Social Environment: Core Options						3	Social Environment: Core Options											3
Semester 4							**Semester**											
AMT 40H				5	5	5	AMT 40H				5		5	5		5	5	5
AMT 43					4	4	AMT 43									4	4	4
AMT 60					4	4	AMT 60									4	4	4
							AMT 172					3	3					
							AMT 173				3		3					
Communication: Core Options						3	Communication: Core Options											3
TOTALS	10	12	13	23	51	69	**TOTAL CREDITS**	10	12	13	18	19	27	27	27	30	51	69

PRESENT OPTIONS:

GENERAL SKILLS/ED CORE OPTIONS, SPRING 2013		
Category	Cr	Course Options
Communication (Written and Oral Communication combined)	3	BUS 130, BUS 175; CULN 160; ENG 100, ENG 104 or higher; JOUR 205; LING 102; SP 151, SP 185, SP 231, SP 251; any WI course; or any FW designation
Cultural Environment	3	ANTH 200, ANTH 220; BOT 105; CULN 130; HOST 101; SP 185; any Humanities course; or any DA, DH, or DL designation, including languages
Social Environment	3	BUS 120; ED 105, ED 131, ED 140, ED 245; HOST 125; HPER 195; MGT 122; PHIL 101; any Social Science course; or any DS designation

PROPOSED OPTIONS:

GENERAL SKILLS/ED CORE OPTIONS, SPRING 2016		
Category	Cr	Course Options
Communication (Written and Oral Communication combined)	3	BUS 130, BUS 175; CULN 160; ENG 100, ENG 104 or higher; JOUR 205; LING 102; SP 151, SP 185, SP 231, SP 251; any WI course; or any FW designation
Cultural Environment	3	ANTH 200, ANTH 220; BOT 105; CULN 130; HOST 101; SP 185; any Humanities course; or any DA, DH, or DL designation, including languages
Social Environment	3	BUS 120; ECED 105, ECED 131, ECED 140, ECED 245; HOST 100; HPER 195; MGT 122; PHIL 101; any Social Science course; or any DS designation
Thinking, Reasoning/Mathematics	3	ACC 124, ACC 201;BUSN 189; ICS 111; MATH 100 or higher; PHIL 110; or any FS designation

2.   **Program Type:**

☒ Associate in Applied Science (AAS)
☐ Associate in Arts (AA)
☐ Associate in Arts–Concentration
☐ Associate in Science (AS)
☐ Associate in Science Natural Sciences–Concentration (ASNS)

☒ Certificate of Achievement (CA)
☒ Certificate of Competence (CO)
☐ Academic Subject Certificate (ASC)

3.   **Program Title:** Automotive Technology

4.   **Program Description (for catalog):**

The Automotive Technology program is a competency-based program designed following standards specified by the National Automotive Education Foundation (NATEF). The competencies the student is expected to achieve in the program are based on the task described by NATEF. A student who successfully completes the program will receive training in all of the eight areas described by NATEF: A-1 Engine Repair; A-2 Automatic Transmission and Transaxle; A-3 Manual Drive Train and Axles; A-4 Suspension and Steering; A-5 Brakes; A-6 Electrical/Electronic Systems; A-7 Heating and Air Conditioning; and A-8 Engine Performance. In order to meet global changes, the automotive industry has gone Green with Hybrid and Electric vehicles. Our program will meet the industry needs by providing training in sustainable energy with Hybrid and Electric Vehicle (HEV) Technology and alternative fuels.

The goals of the program are to prepare students with the skills and competencies necessary for a successful career as an automotive technician, to instill in the student the work habits and attitude necessary to work in a highly competitive field, and to provide the student with the basic skills necessary to become a lifelong learner in order to keep abreast of the latest technological changes in the automobile.

The Automotive Technology program courses are clustered into certificates, each providing a set of marketable workplace skills. The Certificates of Competence (COs) in HEV Preventive Maintenance and Repair and the HEV Diagnostic and Repair lead to a Certificate of Achievement (CA) in Automotive Green Technology. The Drive Train Specialist, Engine Specialist, and Undercar

Specialist lead to the CA in Automotive Technology Heavy Line Technician. In addition, other certificates earned are the Electronics/Computer Controls Technician, Driveability Technician, and Master Automobile Service Technology CAs that lead to the Associate in Applied Science (AAS) degree. This two-year AAS degree program is offered every year.

This program is articulated with other UH Community College Automotive programs. Students should plan to enroll in all the Automotive Technology program courses offered each semester in order to earn the desired certificate or degree in the shortest time possible. Students are strongly encouraged to consult with an academic advisor to help them plan the best path for reaching their academic goals.

The cost of tools and supplies for the program is approximately $2,500. This cost can vary considerably, depending on where the student chooses to buy tools and supplies.

Program Admission Requirements:

Applicants will be admitted into the Automotive Technology program on a "first applied, first qualified" basis. Students not meeting prerequisites may take non-AMT designated courses required in the program and begin the cycle of automotive (AMT) courses once prerequisites are met. First-semester courses require qualification into ENG 21 or higher, and MATH 100 or higher OR a co-requisite of AMT 20 and MATH 75X. Students must maintain a valid driver's license throughout the course of study.

Graduation Requirements:

A GPA of 2.0 or higher in all AMT courses is needed to meet graduation requirements.

5. **List Program Student Learning Outcomes** that were approved by the Assessment Committee on 4/30/15.

   1. Demonstrate technical proficiency in entry-level skills for employment in the automotive service field or related areas.
   2. Apply the theory behind automotive procedures and use critical thinking when performing service, maintenance, diagnostics, and repair of all major automotive systems.
   3. Comply with personal and environmental safety practices in accordance with applicable safety and environmental regulations.
   4. Identify and use appropriate tools, testing, and measuring equipment required to accomplish each task established by the National Automotive Technology Education Foundation (NATEF).
   5. Locate references, training information and manufacturer's procedures from industry resources using the appropriate technology and perform tasks in accordance with their research.
   6. Perform all diagnostic and repair tasks in accordance with manufacturer's recommended procedures as published.
   7. Communicate effectively both orally and in writing.

6. **Proposed Date of First Offering:** Fall 2016

7. **Is this program offered at another UH campus?** ☒ Yes ☐ No
    If **Yes,** specify campus. If **No,** why is this program offered at KCC:

    Hawai'i CC, Honolulu CC, Leeward CC, and UH Maui College

8. **Reason for this Program Action:**

    The AMT program is updating its General Education (Gen Ed) graduation requirements for the AAS degree to address the ACCJC recommendations with 100 level or higher in all Gen Ed courses. The MATH 100 requirement will be changed to the Thinking/Reasoning Mathematics Core Options to allow students more options to choose with this graduation requirement.

    New HEV courses already approved will be included under the AAS program. Packaging all AMT courses into new clusters to create new certificates will directly align with industry job classification and NATEF standards that lead to gainful employment.

9. **Board of Regents Approval Needed:** ☐ Yes ☒ No

10. **Indicate the number of semesters required to complete each certificate and degree.**

Certificate/Degree	Number of Semesters
CO Drive Train Specialist	2
CO Engine Specialist	2
CO Undercar Specialist	1
CO HEV Diagnostic and Repair	2
CO HEV Preventive Maintenance and Repair	2
CA Automotive Green Technology	2
CA Electronics/Computer Control Technician	4
CA Heavy Line Technician	3
CA Driveability Technician	4
CA Master Automobile Service Technology	4
AAS Automotive Technology	4

11. **Program Course Sequencing:** Complete one for each certificate/degree if sequencing is not provided with question #1.

Course Offering
FALL Semester (First year)
AMT 20 Intro to Automotive 2 cr.
AMT 40E Electrical I 4 cr.
AMT 53 Brakes 3 cr.
AMT 55 Suspension and Steering 4 cr.
Thinking Reasoning/MATH 3 cr.
PHYS 101 CTE Physics 3 cr.
SPRING Semester
AMT 30 Engines 6 cr.
AMT 40G Electrical II 3 cr.
AMT 46 Man. Drivetrain and Axles 4 cr.
ETRO 18 General Electronics 3 cr.
FALL Semester (Second year)
AMT 40B Fuels and Emissions 3 cr.
AMT 40D Engine Performance I 3 cr.
AMT 41 Ignition Systems 2 cr.
AMT 50 Auto Trans and Transaxles 4 cr.
AMT 171 HEV I Intro HEV 3 cr.
Cultural Environment 3 cr.
Social Environment 3 cr.
SPRING Semester
AMT 40H Engine Performance II 5 cr.
AMT 43 Heating and AC 4 cr.
AMT 60 Diagnostic and Repair 4 cr.
AMT 172 HEV II Preventive Maintenance
and Repair 3 cr.
AMT 173 HEV III Diagnostic and Repair 3 cr.

Undercar Specialist CO 13 cr.
AMT 20, AMT 40E, AMT 53, and AMT 55

Engine Specialist CO 12 cr.
AMT 20, AMT 30, and AMT 40E

Drive Train Specialist CO 10 cr.
AMT 20. AMT 40E. and AMT 46

AMT 50

**HEAVY LINE TECHNICIAN CA
27 cr.**
Undercar Specialist CO, Engine
Specialist CO, Drive Train
Specialist CO, and AMT 50

**MASTER AUTOMOBILE SERVICE
TECHNOLOGY CA 51 cr.**
AMT 20, AMT 30, AMT 40B,
AMT 40D, AMT 40E, AMT 40G,
AMT 40H, AMT 41, AMT 43, AMT 46,
AMT 50, AMT 53, AMT 55, and AMT 60

**General Education 15 cr.
and ETRO 18**

**AUTOMOTIVE TECHNOLOGY AAS
69 cr.**

**ELECTRONICS/COMPUTER CONTROL
TECHNICIAN CA 27 cr.**
AMT 40B, AMT 40D, AMT 40E, AMT 40G,
AMT 40H, AMT 41, AMT 43, and ETRO 18

DRIVEABILITY TECHNICIAN CA 30 cr.
AMT 30, AMT 40B, AMT 40D, AMT 40E,
AMT 40G, AMT 40H, AMT 41, and
AMT 60

**HEV Preventive Maintenance and
Repair CO 19 cr.**
AMT 30, AMT 40E, AMT171,
AMT 172, and ETRO 18

**HEV Diagnostic and Repair CO
18 cr.**
AMT 40E, AMT 40H, AMT 171,
AMT 173, and ETRO 18

**AUTOMOTIVE GREEN TECHNOLOGY
CA 27 cr.**
HEV Preventive Maintenance and
Repair CO

HEV Diagnostic and Repair CO

POTENTIAL DEGREE and CERTIFICATES EARNED

AUTOMOTIVE TECHNOLOGY AAS
MASTER AUTOMOBILE SERVICE TECHNOLOGY CA
DRIVEABILITY TECHNICIAN CA
HEAVY LINE TECHNICIAN CA
ELECTRONICS/COMPUTER CONTROL TECHNICIAN CA
UNDER CAR SPECIALIST CO
ENGINE SPECIALIST CO
DRIVE TRAIN SPECIALIST CO
AUTOMOTIVE GREEN TECHNOLOGY CA
HEV PREVENTIVE MAINTENANCE AND REPAIR CO
HEV DIAGNOSTIC AND REPAIR CO

1-AAS DEGREE
5-CA
5-CO

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Rev. 10/23/15

PROGRAM ACTION REQUEST APPROVAL

PROGRAM: Automotive Technology Certificates of Competence, Certificates of Achievement, and Associate in Applied Science Degree

Effective date: Fall 2016

PSLOs Approved by: _____

Assessment Committee Chairperson   Date

Proposed by: _____

Originator   Date

Requested by: _____

Department/Division Chairperson   Date

Approved by: _____

Curriculum Committee Chairperson   Date

_____

Vice Chancellor for Academic Affairs   Date

_____

Chancellor   Date