

## Associate of Science in Automotive Service Technology Master Service Technician

### Program Mission

The mission of the Automotive program is to develop a skilled and competent automotive workforce, based on industry needs, for the Guam community and the region.

### Program Description

The Associate of Science program in Automotive Service Technology Master Technician offers students both a comprehensive general education as well as advanced technical training in all automotive systems to include: brakes; electrical/electronic; engine performance; suspension & steering; automatic transmission; manual transmission/transaction; engine repair; manual drive trains; and Heating, Ventilation, and Air Conditioning (HVAC).

The primary program objective is to prepare students to pass all eight content area certification examinations administered by the National Institute for Automotive Service Excellence (ASE). Upon passage of examinations and after two years of automotive industry experience, students will receive ASE Certification as a Master Automobile Technician.

### Program Student Learning Outcomes (SLOs):

Upon successful completion of the AS in Automotive Service Technology program, students will be able to:

1. Identify the purposes and proper functioning of the core components of an automotive engine.
2. Test the performance of the heating, ventilation, and air conditioning system and perform corrective action.
3. Demonstrate the proper use of a digital multimeter (DMM) during diagnosis of electrical circuit problems.
4. Service components in the brake, steering, and suspension systems.

General Education Requirements		
Course #	Course Name	Credits
EN110	Freshman Composition	3
MA110A	Finite Mathematics	3
CS151	Windows Applications	3
PY125	Interpersonal Relations	3
SI 103/ 103L	Introduction to Marine Biology (3) & Introduction to Marine Biology Laboratory (1)	4
VC101	Introduction to Visual Communications	3
<b>Total</b>		<b>19</b>
Technical/Core Requirements		
Course #	Course Name	Credits
AST100	Introduction to Automotive Service	3
AST110	Engine Repair	3
AST120	Automatic Transmission and Transaxle	3
AST130	Manual Drive Train and Axles	3
AST140	Suspension and Steering	3

AST150	Brakes	3
AST160	Electrical/Electronic Systems	3
AST180A	Engine Performance I	3
AST170	Heating and Air Conditioning	3
AST180B	Engine Performance II	3
AST210	Theory/Practicum: Engine Repair	3
AST220	Theory/Practicum: Automotive Transmission and Transaxle	3
AST230	Theory/Practicum: Manual Drive Train and Axles	2
AST240	Theory/Practicum: Suspension and Steering	2
AST250	Theory/Practicum: Brakes	2
AST270	Theory/Practicum: Heating and Air Conditioning	2
AST260	Theory/Practicum: Electrical/Electronic Systems	4
AST280	Theory/Practicum: Engine Performance	5
<b>Total</b>		<b>53</b>
<b>Program Total</b>		<b>72</b>

## Associate of Science in Automotive Service Technology Master Service Technician - Semester Breakdown

Year 1		
Semester 1		
Course #	Course Name	Credits
EN110	Freshman Composition	3
MA110A	Finite Mathematics	3
AST100	Introduction to Automotive Service	3
SI 103/ 103L	Introduction to Marine Biology (3) & Introduction to Marine Biology Laboratory (1)	4
<b>Total</b>		<b>13</b>
Semester 2		
Course #	Course Name	Credits
AST110	Engine Repair	3
AST120	Automatic Transmission and Transaxle	3
AST130	Manual Drive Train and Axles	3
AST140	Suspension and Steering	3
<b>Total</b>		<b>12</b>
<b>Year 1 Total</b>		<b>25</b>
Year 2		
Semester 3		
Course #	Course Name	Credits
AST150	Brakes	3
AST160	Electrical/Electronic Systems	3
AST180A	Engine Performance I	3
AST170	Heating and Air Conditioning	3
<b>Total</b>		<b>12</b>

Semester 4		
Course #	Course Name	Credits
AST180B	Engine Performance II	3
PY125	Interpersonal Relations	3
CS 151	Windows Applications	3
AST210	Theory/Practicum: Engine Repair	3
<b>Total</b>		<b>12</b>
<b>Year 2 Total</b>		<b>24</b>
Year 3		
Semester 5		
Course #	Course Name	Credits
AST220	Theory/Practicum: Automotive Transmission and Transaxle	3
AST230	Theory/Practicum: Manual Drive Train and Axles	2
AST240	Theory/Practicum: Suspension and Steering	2
AST250	Theory/Practicum: Brakes	2
AST270	Theory/Practicum: Heating and Air Conditioning	2
<b>Total</b>		<b>11</b>
Semester 6		
Course #	Course Name	Credits
AST260	Theory/Practicum: Electrical/Electronic Systems	4
AST280	Theory/Practicum: Engine Performance	5
VC101	Introduction to Visual Communications	3
<b>Total</b>		<b>12</b>
<b>Year 3 Total</b>		<b>23</b>
<b>Program Total</b>		<b>72</b>