

**AUTOMOTIVE SYSTEMS TECHNOLOGY  
A.A.S. Program (A60160)**

**Automotive Systems Technology • A60160  
Suggested Program Sequence Day**

**Courses required to meet graduation requirements are offered during day and evening hours. Minimum time for completion: Day - five semesters full-time attendance: Evening - will vary according to semester load of student (usually seven to nine semesters). The Associate of Applied Science degree or Diploma is awarded to graduates in this curriculum.**

The Automotive Systems Technology curriculum prepares individuals for employment as Automotive Service Technicians. It provides an introduction to automotive careers and increases student awareness of the challenges associated with this fast and ever-changing field. Classroom and lab experiences integrate technical and academic course work. Emphasis is placed on theory, servicing and operation of brakes, electrical/electronic systems, engine performance, steering/suspension, automatic transmission/transaxles, engine repair, climate control, and manual drive trains. Upon completion of this curriculum, students should be prepared to take the ASE exams and be ready for full-time employment in dealerships and repair shops in the automotive service industry. The Automotive Systems Technology program is Accredited by the National Automotive Technicians Education Foundation.

**GENERAL EDUCATION COURSES: .....SHC**

English/Communications:	
ENG 111	Writing and Inquiry.....3
ENG 114	Prof Research & Reporting.....3
OR	ENG 112 Writing/Research in the Disc.....3
OR	ENG 113 Literature-Based Research.....3
Humanities/Fine Arts:	
Elective	.....3
Natural Sciences/Mathematics:	
MAT 110	Math Measurement & Literacy.....3
OR	MAT 143 Quantitative Literacy.....3
Social/Behavioral Sciences:	
Elective	.....3

**MAJOR COURSES:**

AUT 113	Automotive Servicing I.....2
AUT 116	Engine Repair.....3
AUT 116A	Engine Repair Lab.....1
AUT 141	Suspension & Steering Sys.....3
AUT 141A	Suspension & Steering Lab.....1
AUT 151	Brake Systems.....3
AUT 151A	Brake Systems Lab.....1
AUT 163	Adv Auto Electricity.....3
AUT 163A	Adv Auto Electricity Lab.....1
AUT 181	Engine Performance 1.....3
AUT 181A	Engine Performance 1 Lab.....1
AUT 183	Engine Performance 2.....4
AUT 212	Auto Shop Management.....3
AUT 221	Auto Transm/Transaxles.....3
AUT 221A	Auto Transm/Transax Lab.....1
AUT 231	Man Trans/Axles/Drtrains.....3
AUT 231A	Man Trans/Ax/Drtrains Lab.....1
AUT 281	Adv Engine Performance.....3
TRN 110	Intro to Transport Tech.....2
TRN 120	Basic Transp Electricity.....5
TRN 140	Transp Climate Control.....2
TRN 140A	Transp Climate Cont Lab.....2
TRN 170	Pc Skills for Transp.....2
WBL 110	World of Work.....1
WLD 112	Basic Welding Processes.....2

**Work-Based Learning Option:** Qualified students may elect to take up to 7 credit hours of Work-Based Learning in place of AUT 116A, AUT 141A, AUT 151A, AUT 163A, AUT 181A, AUT 221A, or AUT 231A.

**Total Credit Hours Required .....71**

**DEVELOPMENTAL COURSE REQUIREMENTS\***

CTS 080	Computing Fundamentals.....3
DRE 098	Integrated Reading Writing III.....3
DMA DMA 010, DMA 020, DMA 030 (MAT 110)	.....3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143)	.....5

\*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

		Class	Lab	Clin/W/Exp	Credit
<b>Fall – 1st year</b>					
AUT 116	Engine Repair (1st 8 weeks)	2	3	0	3
AUT 116A	Engine Repair Lab (1st 8 weeks)	0	3	0	1
AUT 181	Engine Performance 1 (2nd 8 weeks)	2	3	0	3
AUT 181A	Engine Performance 1 Lab (2nd 8 weeks)	0	3	0	1
TRN 110	Intro to Transport Tech	1	2	0	2
TRN 120	Basic Transp Electricity	4	3	0	5
TRN 170	Pc Skills for Transp	1	2	0	2
	<b>Total</b>	<b>10</b>	<b>19</b>	<b>0</b>	<b>17</b>
<b>Spring – 1st year</b>					
AUT 113	Automotive Servicing I	0	6	0	2
AUT 183	Engine Performance 2 (1st 8 weeks)	2	6	0	4
AUT 151	Brake Systems (2nd 8 weeks)	2	3	0	3
AUT 151A	Brake Systems Lab (2nd 8 weeks)	0	3	0	1
AUT 163	Adv Auto Electricity	2	3	0	3
AUT 163A	Adv Auto Electricity Lab	0	3	0	1
WBL 110	World of Work	1	0	0	1
	<b>Total</b>	<b>7</b>	<b>24</b>	<b>0</b>	<b>15</b>
<b>Summer – 1st year</b>					
ENG 111	Writing and Inquiry	3	0	0	3
MAT 110	Math Measurement & Literacy	2	2	0	3
OR	MAT 143 Quantitative Literacy	2	2	0	3
	<b>Total</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>6</b>
<b>Fall – 2nd year</b>					
AUT 141	Suspension & Steering Sys (2nd 8 Weeks)	2	3	0	3
AUT 141A	Suspension & Steering Lab (2nd 8 Weeks)	0	3	0	1
AUT 212	Auto Shop Management	3	0	0	3
AUT 281	Adv Engine Performance	2	2	0	3
TRN 140	Transp Climate Control (1st 8 weeks)	1	2	0	2
TRN 140A	Transp Climate Cont Lab (1st 8 weeks)	1	2	0	2
	<b>Total</b>	<b>9</b>	<b>12</b>	<b>0</b>	<b>14</b>
<b>Spring – 2nd year</b>					
AUT 221	Auto Transm/Transaxles (2nd 8 Weeks)	2	3	0	3
AUT 221A	Auto Transm/Transax Lab (2nd 8 Weeks)	0	3	0	1
AUT 231	Man Trans/Axles/Drtrains (1st 8 weeks)	2	3	0	3
AUT 231A	Man Trans/Ax/Drtrains Lab (1st 8 weeks)	0	3	0	1
WLD 112	Basic Welding Processes	1	3	0	2
	Social/Behavioral Science Elective	3	0	0	3
	<b>Total</b>	<b>8</b>	<b>15</b>	<b>0</b>	<b>13</b>
<b>Summer – 2nd year</b>					
ENG 114	Prof Research & Reporting (Preferred)	3	0	0	3
OR	ENG 112 Writing/Research in the Disc	3	0	0	3
OR	ENG 113 Literature-Based Research	3	0	0	3
	Humanities/Fine Art Elective	3	0	0	3
	<b>Total</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>
	<b>Grand Total</b>	<b>45</b>	<b>72</b>	<b>0</b>	<b>71</b>

**Work-Based Learning Option:** Qualified students may elect to take up to 7 credit hours of Work-Based Learning in place of AUT 116A, AUT 141A, AUT 151A, AUT 163A, AUT 181A, AUT 221A, or AUT 231A.

**AUTOMOTIVE SYSTEMS TECHNOLOGY  
Diploma Program (D60160)**

**GENERAL EDUCATION COURSES: .....SHC**

English/Communications:	
ENG 111	Writing and Inquiry .....3
Natural Sciences/Mathematics:	
MAT 110	Math Measurement & Literacy .....3
OR	MAT 143 Quantitative Literacy .....3

**MAJOR COURSES:**

AUT 116	Engine Repair .....3
AUT 116A	Engine Repair Lab .....1
AUT 141	Suspension & Steering Sys.....3
AUT 141A	Suspension & Steering Lab .....1
AUT 151	Brake Systems .....3
AUT 151A	Brake Systems Lab .....1
AUT 163	Adv Auto Electricity .....3
AUT 181	Engine Performance 1 .....3
AUT 181A	Engine Performance 1 Lab .....1
AUT 183	Engine Performance 2 .....4
AUT 221	Auto Transm/Transaxles .....3
AUT 221A	Auto Transm/Transax Lab .....1
AUT 231	Man Trans/Axles/Drtrains .....3
AUT 231A	Man Trans/Ax/Drtrains Lab .....1
TRN 110	Intro to Transport Tech.....2
TRN 120	Basic Transp Electricity .....5
TRN 140	Transp Climate Control.....2
TRN 140A	Transp Climate Cont Lab.....2

**Automotive Systems Technology**

**Work-Based Learning Option:** Qualified students may elect to take up to 4 credit hours of Work-Based Learning in place of AUT 116A, AUT 141A, AUT 151A, AUT 181A, AUT 221A, or AUT 231A.

**Total Credit Hours Required .....48**

**DEVELOPMENTAL COURSE REQUIREMENTS\***

CTS 080	Computing Fundamentals.....3
DMA DMA 010, DMA 020, DMA 030 (MAT 110).....3	
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143).....5	
DRE 098	Integrated Reading Writing III.....3

\*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

**Automotive Systems Technology – Diploma • D60160  
Suggested Program Sequence Evening**

**Fall – 1st year**

AUT 116	Engine Repair (2nd 8 Wks)	2	3	0	3
AUT 116A	Engine Repair Lab (2nd 8 Wks)	0	3	0	1
TRN 110	Intro to Transport Tech	1	2	0	2
TRN 120	Basic Transp Electricity (1st 8 Wks)	4	3	0	5
<b>Total</b>		<b>7</b>	<b>11</b>	<b>0</b>	<b>11</b>

**Spring – 1st year**

AUT 151	Brake Systems (2nd 8 Wks)	2	3	0	3
AUT 151A	Brake Systems Lab (2nd 8 Wks)	0	3	0	1
AUT 163	Adv Auto Electricity (1st 8 Wks)	2	3	0	3
MAT 110	Math Measurement & Literacy	2	2	0	3
OR	MAT 143 Quantitative Literacy	2	2	0	3
<b>Total</b>		<b>6</b>	<b>11</b>	<b>0</b>	<b>10</b>

**Fall – 2nd year**

AUT 181	Engine Performance 1 (1st 8 Wks)	2	3	0	3
AUT 181A	Engine Performance 1 Lab (1st 8 Wks)	0	3	0	1
AUT 231	Man Trans/Axles/Drtrains (2nd 8 Wks)	2	3	0	3
AUT 231A	Man Trans/Axl/Drtrains Lab (2nd 8 Wks)	0	3	0	1
<b>Total</b>		<b>4</b>	<b>12</b>	<b>0</b>	<b>8</b>

**Spring – 2nd year**

AUT 221	Auto Transm/Transaxles (1st 8 Wks)	2	3	0	3
AUT 221A	Auto Transm/Transax Lab (1st 8 Wks)	0	3	0	1
AUT 183	Engine Performance 2 (2nd 8 Wks)	2	6	0	4
ENG 111	Writing and Inquiry	3	0	0	3
<b>Total</b>		<b>7</b>	<b>12</b>	<b>0</b>	<b>11</b>

**Fall – 3rd year**

AUT 141	Suspension & Steering (2nd 8 Wks)	2	3	0	3
AUT 141A	Suspension & Steering Lab (2nd 8 Wks)	0	3	0	1
TRN 140	Transp Climate Control (1st 8 weeks)	1	2	0	2
TRN 140A	Transp Climate Cont Lab (1st 8 weeks)	1	2	0	2
<b>Total</b>		<b>4</b>	<b>10</b>	<b>0</b>	<b>8</b>
<b>Grand Total</b>		<b>28</b>	<b>56</b>	<b>0</b>	<b>48</b>

**AUTOMOTIVE SYSTEMS TECHNOLOGY  
Under Car Services Concentration Cert. Program (C60160)**

**Major Courses .....SHC**

AUT 141	Suspension & Steering Sys .....3
AUT 141A	Suspension & Steering Lab .....1
AUT 151	Brake Systems .....3
AUT 151A	Brake Systems Lab .....1
TRN 110	Intro to Transport Tech .....2
TRN 120	Basic Transp Electricity .....5

**Total Credit Hours Required ..... 15**

**DEVELOPMENTAL COURSE REQUIREMENTS\***

CTS 080	Computing Fundamentals.....3
DMA DMA 010, DMA 020, DMA 030.....3	
DRE 097	Integrated Reading Writing II.....3

\* Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

**Automotive Systems Technology – Under Car Services Concentration  
Certificate Program (C60160) Suggested Sequence**

**Fall – 1st Year**

TRN 110	Intro to Transport Tech	1	2	0	2
TRN 120	Basic Transp Electricity	4	3	0	5
AUT 141	Suspension & Steering Sys	2	3	0	3
AUT 141A	Suspension & Steering Lab	0	3	0	1
<b>Total</b>		<b>7</b>	<b>11</b>	<b>0</b>	<b>11</b>

**Spring – 1st Year**

AUT 151	Brake Systems	2	3	0	3
AUT 151A	Brake Systems Lab	0	3	0	1
<b>Total</b>		<b>2</b>	<b>6</b>	<b>0</b>	<b>4</b>
<b>Grand Total</b>		<b>9</b>	<b>17</b>	<b>0</b>	<b>15</b>

**Work-Based Learning Option:** Qualified students may elect to take up to 2 credit hours of work-based learning in place of AUT 141A, AUT 151A.