

Automotive Systems Technology

FALL 2009

[A60160]; Associate in Applied Science Degree (Day); [D60160] Diploma (Day); [C60160] Certificate (Day)

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 exam and be ready for full-time employment in dealerships and repair shops in the automotive service industry.

COMPETENCIES

Randolph Community College is committed to continuous improvement through program evaluation. One part of the evaluation is to assess program competencies. While our program contains many competencies for students to achieve, each year a select few are chosen for assessment purposes. This year, the Automotive Systems Technology Program competency assessment will focus on these:

1. Determine the cause of an illuminated Malfunction Indicator Light (MIL).
2. Determine the cause and choose the correction of vehicle power train problems.
3. Successfully diagnose and repair the cause of vehicle ride problems.
4. Interpret wiring diagrams.
5. Diagnose the cause of climate control problems.

GENERAL ADMISSIONS REQUIREMENTS FOR CURRICULUM PROGRAMS

Applicants for admission to Randolph Community College must be 18 years of age or high school graduates. The College will accept students with a high school equivalency diploma. A high school diploma or the equivalent is required of all applicants enrolling in curriculum courses. Persons intending to enroll in a specific curriculum are encouraged to submit their applications at least two months prior to the term in which they wish to enroll. Applicants are not admitted into specific curriculum programs, and thus, not eligible for financial aid until admission requirements are met (i.e. transcripts, testing, etc.). Applications can be obtained from high school counselors and from Student Services.

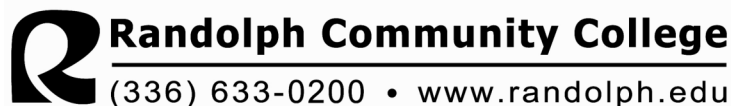
IN ORDER TO ENROLL, THE STUDENT SHOULD

- complete an RCC application,
- provide official copies of high school transcript and/or GED test scores and all college transcripts,*
- call (336) 633-0224 to discuss placement testing,
- meet with someone in RCC's financial aid office if necessary, (336) 633-0205,
- meet with your faculty advisor (during specified registration period),
- register and pay for classes (during specified registration period).

*Applicants who are high school graduates should request a copy of their high school transcript. In cases where the last six weeks' work is not completed, a supplemental transcript should be forwarded to the College after the student's graduation. GED graduates must submit official copies of their GED test scores. Students transferring from other colleges or post-high school institutions must submit official transcripts from all such institutions attended. For transcript release forms, call Student Services, (336) 633-0224. Transcripts are not official unless they are sent directly from the high school or college attended.

FACULTY ADVISOR

The faculty advisor for Automotive Systems Technology is Don Ashley, jdashley@randolph.edu. (336) 625-1983.



		Hours/Week		Sem. Hrs	
		Class	Lab	Wk. Exp.	Credit
First Year: Fall Semester					
AUT 110	* Intro to Auto Technology	2	2	0	3
AUT 116	* Engine Repair	2	3	0	3
AUT 116A	* Engine Repair Lab	0	3	0	1
AUT 161	* +Basic Auto Electricity	4	3	0	5
CIS 113	* Computer Basics	0	2	0	1
ENG 111	* Expository Writing	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
		11	13	0	16
First Year: Spring Semester					
AUT 163	* Adv Auto Electricity	2	3	0	3
AUT 163A	* Adv Auto Electricity Lab	0	3	0	1
AUT 141	* +Suspension & Steering Sys	2	3	0	3
AUT 141A	* +Suspension & Steering Sys Lab	0	3	0	1
AUT 151	* +Brake Systems	2	3	0	3
AUT 151A	* +Brake Systems Lab	0	3	0	1
ENG 114	* Professional Research & Reporting	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
		9	18	0	15
First Year: Summer Session					
PHY 121	* Applied Physics I	3	2	0	4
AUT 181	* Engine Performance 1	2	3	0	3
AUT 181A	* Engine Performance 1 Lab	0	3	0	1
<i>or</i>					
COE 112	* Cooperative Work Experience I	<u>0</u>	<u>0</u>	<u>20</u>	<u>2</u>
		5	8	0	8
			<i>or</i>		
		5	5	20	9
Second Year: Fall Semester					
AUT 183	Engine Performance 2	2	6	0	4
AUT 231	Man Trans/Axles/Drtrains	2	3	0	3
AUT 231A	Man Trans/Ax/Drtrains Lab	0	3	0	1
<i>or</i>					
COE 111	Cooperative Work Experience I	0	0	10	1
AUT 285	Intro to Alternative Fuels	2	2	0	3
---	Humanities/Fine Arts	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
		9	14	10	14
			<i>or</i>		
		9	11	10	14
Second Year: Spring Semester					
AUT 281	Adv Engine Performance	2	2	0	3
AUT 221	Auto Transm/Transaxles	2	3	0	3
AUT 221A	Auto Transm/Transax Lab	0	3	0	1
<i>Or</i>					
COE 121	Cooperative Work Experience II	0	0	10	1
AUT 283	Advanced Automotive Electronics	2	2	0	3
---	Social/Behavioral Science	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
		9	10	10	13
			<i>or</i>		
		9	7	10	13
Second Year: Summer Session					
AUT 171	Auto Climate Control	<u>2</u>	<u>4</u>	<u>0</u>	<u>4</u>
		2	4	0	4

* Courses required for diploma
+ Courses required for certificate

TOTAL SEMESTER HOURS CREDIT FOR DEGREE: 68-71
TOTAL SEMESTER HOURS CREDIT FOR DIPLOMA: 39 or 40
TOTAL SEMESTER HOURS CREDIT FOR CERTIFICATE: 13

Visit RCC's website: www.randolph.edu
An application for admission is available to be downloaded from the web