

PROGRAM CURRICULUM

Automotive Technology TSEP Certificate

DIVISION OF TRANSPORTATION & ENERGY

The Technical Service Educational Program (TSEP) is a collaborative effort between MassBay and independent repairs facilities. The College retains academic and administrative responsibility for the program. It is designed to upgrade the technical competence and professional level of automotive technicians in the independent auto repair industry.

The TSEP consists of three separate components. There is the choice of enrolling in all three curricula to earn a certificate, or enrolling in just one or two courses to update present skills. Classroom learning is combined with automotive lecture/laboratory instruction provided on state-of-the-art training equipment.

Students gain experience working on all makes and models of vehicles at our MassBay Automotive Technology Center. In addition, the cooperative education phase of their training gives students the opportunity to work at an area repair shop.

Upon successful completion, the Certificate in Automotive Technology with concentrations in Undercarriage Repair, Drive Systems and Electrical/Engine Performance/HVAC is awarded, depending upon the course of study.

ADMISSION REQUIREMENTS

Minimum eligibility for admission to this program includes:

- MassBay placement into College Writing (WR 100) or completion of Intro to Language (LN 090)
- MassBay placement into Introductory Algebra (MA 095) or completion of Basic Math Studies (MA 090)
- Valid driver's license
(May be subject to dealership review of driving record and drug testing)

COURSE	COURSE TITLE	CREDITS
Certificate I		
Undercarriage Repair		
AI 100	Automotive Fundamentals	1
AI 106	Automotive Brake Systems	3
AI 204	Auto Suspension Systems	3
MAC 101	Technical Math	3
SF 131	Oral Communication	3
WR 100	College Writing	4
AI 121	Cooperative Education I	2
Total Credits:		19
Certificate II		
Drive Systems		
AI 100	Automotive Fundamentals	1
AI 103	Automotive Engine Diagnosis and Repairs	5
AI 202	Manual Transmission & Drive Lines	3
AI 203	Automatic Transmission	3
MAC 101	Technical Math	3
SF 131	Oral Communication	3
WR 100	College Writing	4
AI 122	Cooperative Education II	2
Total Credits:		24
Certificate III		
Electrical/Engine Performance/ HVAC		
AI 100	Automotive Fundamentals	1
AI 102	Automotive Electrical Fundamentals	5
AI 105	Heating and Air-Conditioning Theory	3
AI 200	Engine Performance	5
MAC 101	Technical Math	3
SF 131	Oral Communication	3
WR 100	College Writing	4
AI 123	Cooperative Education III	2
Total Credits:		26