

## Automotive Technology (Global, GMASEP, Chrysler)- Associate in Applied Science (2020-21 Catalog)

#### SEMESTER-BY-SEMESTER PROGRAM MAP FOR FULL-TIME STUDENTS

Courses are listed in preferred order of completion

Plans can be modified to fit student needs by adding more semesters

Choose your courses with your Advisor.

# Developmental Education Courses (if required) □ ACLS050 Introduction to Academic Literacy □ ENGL027 Writing Skills Workshop

Ļ		ENGLU27	Writing Skills Workshop		Location: B= BETH, M= MROE, S=SBTH, E= ESTN, D= DIST *subject to change					
	complete	Course #	Course Title	Credits	Gen Ed	Fall	Winter	Spring		Pre-requisites / Co-requisites
		COLS101	College Success	1		B, M, D		B, M, D	D	
		AUTO/ASEP/AUTC100	Automotive Fundamentals	2		В				
Semester 1		AUTO/ASEP/AUTC101	Automotive Engines	4		В				PRE or CO: AUTO/ASEP/AUTC100
		AUTO/ASEP/AUTC103	Automotive Brakes	3		В				PRE or CO: AUTO/ASEP/AUTC100
		AUTO/ASEP/AUTC104	Automotive Suspension & Alignment	3		В				PRE or CO: AUTO/ASEP/AUTC100
Sei		AUTO/ASEP/AUTC105	Automotive Electrical Systems	3		В				PRE or CO: AUTO/ASEP/AUTC100
		AUTO/ASEP/AUTC106	PA Safety Inspection Certification	1		В				PRE or CO: AUTO/ASEP/AUTC100
			Total Semester Credits:	17						
Semester 2		AUTO145	Winter Practicum	2				on-site		PRE or CO: AUTO/ASEP/AUTC103, 104, & 105
		AUTO/ASEP/AUTC121	Auto Heating & Air Conditioning Systems	3				В		PRE: AUTO/ASEP/AUTC105
		AUTO/ASEP/AUTC125	Advanced Automotive Electronic Systems	3				В		PRE: AUTO/ASEP/AUTC105
		CMTH102	Introduction to Communication	3	Comm	B, M, D		B, M, D	B, M, D	
		ENGL101	English I	3	Comm	B, M, D		B, M, D	B, M, D	PRE: ENGL Placement Policy
		MATH103	Technical Mathematics	3	QL	B, M, D		B, M, D		
-			Total Semester Credits:	17						
-	П	AUTO175	Summer Practicum	4					on-site	PRE: AUTO101, 103, 104, 105, 121, and 125
Sem.	Ш	AU10175	Total Semester Credits:	4					on-site	PRE: AUTU101, 103, 104, 105, 121, and 125
		AUTO203G	Automotive Shop Managemnet Practices (WI)	3		В				PRE: AUTO175 & ENGL101
4		AUTO/ASEP/AUTC211	Automotive Fuel & Emission Systems	3		В				
		AUTO/ASEP/AUTC221	Advanced Engine Performance	3		В				PRE: AUTO/ASEP/AUTC101, 103, 104, 105,
est		AUTO/ASEP/AUTC224	Advanced Automotive Studies	3		В				121, 125,& AUTO175
Semester		ENGL151R	English II (Report Writing)	3	Comm	B, M, D		B, M, D	B,D	PRE: ENGL101
		PHYS152	Physical Science II	3	SCI	B, D		D	D	
			Total Semester Credits:	18						
er 5	П	AUTO245	Winter Practicum II	2		В		В	В	PRE: AUTO125, 211, AUTO/ASEP/AUTC221
			Mechanical Drive Train Systems	4				В		PRE: AUTO125 and AUTO 175
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est		AUTO/ASEP/AUTC226	Automatic Transmission Systems	4				В		PRE: AUTO125 and AUTO 175
Semester		HUMA121	The American Work Experience	3	AH	B,D		B,D	D	
Š		GEOG121	Environmental Sustainability	3	SSHB	B,M,D		B,M,D	D	
			Total Semester Credits	16						
			Total Degree Credits	72						

<sup>\*\*</sup>It is the student's responsibility to be knowledgeable of NCC graduation requirements and to verify transfer requirements with the 4-year institution. Courses listed on the program map are based upon the assumption that prerequisites and courses taken in previous semesters will be successfully completed

General Education Requirements							
	GEOG121	Diversity					
	AUTO203G	Writing Intensive					

#### Notes:

- ASEP are GM-specific courses and AUTC are Chrysler-specific courses.
- · Completion of AUTO203G satisfies the Writing Intensive (WI) requirement for this program
- Computer competencies are included in various courses in this program; thus, completing the program automatically satisfies the computing requirement for this program.
- Recommended additional non-credit course: Welding for Auto Techs.
- AUTO110 Introduction to Hybrid Vehicles is offered as an elective in the Spring Semester
- Students in Automotive Technology (AUTO) must be sponsored by an Automotive Repair shop for Practicums; students in Automotive Technology GM (ASEP) must be sponsored by a GM dealer for Practicums; students in Automotive Technology Chrysler (AUTC) must be sponsored by a Chrysler dealer for Practicums.

#### Program Narrative:

- Today's vehicles are highly sophisticated, using advanced technology that the average car-owner cannot maintain. Customers need and expect qualified automotive technicians now more than ever. Because of this, job opportunities for well-trained technicians continue to grow.
- NCC's program provides students with high-level technical understanding of current developments in the automotive service profession. Our program focuses on the mastery of technology as you prepare for the workplace. The two-year program is approved by GM and Chrysler, and features both classroom work and supervised experience at a sponsoring dealership or approved automotive service facility. Northampton's GM Automotive Service Educational Program (ASEP) and the Chrysler MOPAR College Automotive Program (MCAP) are both certified by the National Automotive Technician Education Foundation.

#### **Program Features:**

- As a student in NCC's associate's degree program you can choose among three different options: the GM ASEP, Chrysler MCAP, and global programs. The ASEP and CAP options focus on courses
  devoted exclusively to current GM or Chrysler vehicles. Global students may select courses which provide product specific information from either GM or Chrysler or non-product specific
  automotive courses. Our specialized diploma in Automotive Technology can be completed in just two semesters.
- Our program requires practicums so you can apply their classroom theory in the real world. During your practicum, you will work under the guidance of a mentor at an approved sponsoring automotive service facility. The knowledge and skills gained in this setting are extremely valuable.
- The cost of tuition, fees, hand tools and other expenses are the responsibility of the student; however, since students are employees of sponsoring dealerships and approved service facilities, they can earn while they learn.

#### **Program Learning Outcomes:**

- Have the ability to demonstrate a positive attitude toward the efficacy of professionalism in the work place.
- Diagnose and repair mechanical systems of automotive engines; automatic transmissions and transaxles; manual drive trains and axles; suspension and steering systems; braking systems; electrical and electronic systems; heating and air conditioning systems; and engine performance systems.
- Exhibit logical thinking throughout essential areas of automotive diagnostics, using published technical information to repair a vehicle while meeting manufacturer's specifications.
- Demonstrate competence in the use of general and highly specialized tools and equipment.
- Demonstrate the ability to communicate effectively on both technical and lay levels.

### Career Information:

- Career Information: Automotive Service Technician, Auto Electronics Specialist, Transmission and Drive Train Specialist, Alignment & Underbody Specialist
- Leading To: Service Writer, Shop Foreman, Specialty Technician