

Last updated on December 19, 2017

## 2017-2018 ACADEMIC CALENDAR

### FALL 2017

Monday, August 28 .....	Fall Semester Classes begin
Monday, September 4.....	Labor Day Holiday – No Classes and Offices Closed
Tuesday, September 5.....	Last day to add a course without instructor’s permission
Tuesday, September 5.....	Last day to drop a First 8-Week Class with a full refund
Monday, September 11.....	Last day to drop a Full Semester Class with a full refund
Friday, September 15.....	Last day to resolve “I” grades from Summer 2017 Semester
Monday, September 25.....	12-Week Classes begin
Friday, September 29.....	Last day to withdraw with “W” grade from a First 8-Week Class
Monday, October 2.....	Last day to drop a 12-Week Class with a full refund
Monday, October 9.....	Columbus Day – All classes are held as scheduled
Tuesday, October 10.....	Last day to withdraw with a “WP” or “WF” grade from a First 8-Week Class
Wednesday, October 11.....	System Symposium (No Day Classes)
Saturday, October 21.....	First 8-Week Classes end
Monday, October 23.....	Second 8-Week Classes begin
Monday, October 30.....	Last day to drop a Second 8-Week Class with a full refund
Thursday, November 2 .....	Last day to withdraw with “W” grade from a Full Semester Class
Friday, November 10.....	Veterans’ Day Holiday Observed – No Classes and Offices Closed
Monday, November 13.....	Last day to withdraw with “W” grade from a 12-Week Class
Monday, November 13.....	Registration opens for 2018 Spring Semester
Thursday, November 23 to Friday, November 24 .....	Thanksgiving Holiday – No Classes and Offices Closed
Friday, November 24.....	Last day to withdraw with “W” grade from a Second 8-Week Class
Tuesday, November 28.....	Last day to withdraw with a “WP” or “WF” grade from a Full Semester Class
Monday, December 4.....	Last day to withdraw with a “WP” or “WF” grade from a 12-Week Class
Monday, December 4.....	Last day to withdraw with a “WP” or “WF” grade from a Second 8-Week Class
Friday, December 15.....	Last day of Fall Semester Classes
Monday, December 25.....	Christmas Day Holiday – Offices Closed
Tuesday, December 26.....	Chancellor’s Day Holiday – Offices Closed

### SPRING 2018

Monday, January 1.....	New Year’s Day Holiday - Offices Closed
Monday, January 15.....	Martin Luther King Jr. / Civil Rights Day Holiday - Offices Closed
Tuesday, January 16.....	Spring Semester Classes begin
Monday, January 22.....	Last day to add a course without instructor’s permission
Monday, January 22.....	Last day to drop a First 8-Week Class with a full refund
Monday, January 29.....	Last day to drop a Full Semester Course with a full refund
Friday, February 2.....	Last day to resolve “I” grades from Fall 2017 Semester
Monday, February 12.....	12-Week Classes begin
Saturday, February 17.....	Last day to withdraw with “W” grade from a First 8-Week Class
Monday, February 19.....	Presidents’ Day Holiday – No Classes and Offices Closed
Tuesday, February 20.....	Last day to drop a 12-Week Class with a full refund
Tuesday, February 27.....	Last day to withdraw with a “WP” or “WF” grade from a First 8-Week Class
Saturday, March 10.....	First 8-Week Classes end
Monday, March 12 to Friday, March 16.....	Spring Break – No Classes
Monday, March 19.....	Second 8-Week Classes begin

## SPRING 2018 CONTINUED

Monday, March 26 .....	Registration opens for 2018 Summer and Fall Semesters
Monday, March 26 .....	Last day to withdraw with "W" grade from a Full Semester Class
Wednesday, March 28 .....	Last day to withdraw with "W" grade from a 12-Week Class
Tuesday, April 17 .....	Last day to withdraw with a "WP" or "WF" grade from a Full Semester Class
Sunday, April 22 .....	Last day to withdraw with a "WP" or "WF" grade from a 12-Week Class
Sunday, April 22 .....	Last day to withdraw with a "WP" or "WF" grade from a Second 8-Week Class
Friday, May 4 .....	Last day of Spring Semester Classes
TBA .....	Graduation

## SUMMER 2018

### General Summer Dates

Monday, May 28 .....	Memorial Day Holiday - No Classes and Offices Closed
Friday, June 1 .....	Last day to resolve "I" grades from Spring 2018 Semester
Wednesday, July 4 .....	Independence Day Holiday - No Classes and Offices Closed

### Full Summer Term (May 14 - August 4)

Monday, May 14 .....	Full Summer Term begins
Monday, May 21 .....	Last day to drop a Full Summer Term Class with a full refund
Monday, July 2 .....	Last day to withdraw with "W" grade from a Full Summer Term Class
Tuesday, July 24 .....	Last day to withdraw with a "WP" or "WF" grade from a Full Summer Term Class
Saturday, August 4 .....	Full Summer Term ends

### 1st Summer Term (May 9 - June 30)

Wednesday, May 9 .....	1st Summer Term begins
Tuesday, May 15 .....	Last day to drop a 1st Summer Term Class with a full refund
Saturday, June 9 .....	Last day to withdraw with "W" grade from a 1st Summer Term Class
Tuesday, June 19 .....	Last day to withdraw with a "WP" or "WF" grade from a 1st Summer Term Class
Saturday, June 30 .....	1st Summer Term ends

### 2nd Summer Term (May 14 - July 7)

Monday, May 14 .....	2nd Summer Term begins
Monday, May 21 .....	Last day to drop a 2nd Summer Term Class with a full refund
Friday, June 15 .....	Last day to withdraw with "W" grade from a 2nd Summer Term Class
Tuesday, June 26 .....	Last day to withdraw with a "WP" or "WF" grade from a 2nd Summer Term Class
Saturday, July 7 .....	2nd Summer Term ends

### 3rd Summer Term (June 18 - August 4)

Monday, June 18 .....	3rd Summer Term begins
Monday, June 25 .....	Last day to drop a 3rd Summer Term Class with a full refund
Monday, July 16 .....	Last day to withdraw with "W" grade from a 3rd Summer Term Class
Tuesday, July 24 .....	Last day to withdraw with a "WP" or "WF" grade from a 3rd Summer Term Class
Saturday, August 4 .....	3rd Summer Term ends

### 4th Summer Term (July 2 - August 4)

Monday, July 2 .....	4th Summer Term begins
Monday, July 9 .....	Last day to drop a 4th Summer Term Class with a full refund
Monday, July 23 .....	Last day to withdraw with "W" grade from a 4th Summer Term Class
Tuesday, July 24 .....	Last day to withdraw with a "WP" or "WF" grade from a 4th Summer Term Class
Saturday, August 4 .....	4th Summer Term ends

## VETERANS EDUCATION BENEFITS

The academic programs at MCC, Manchester Community College have been approved by the NH Department of Education for Veterans Education benefits, for persons eligible for GI Bill® and Federal Tuition Assistance. Students who have questions regarding their eligibility should contact the VA at 1-888-442-4551 or their Education Service Specialist in their military branch. Any student who will be using VA educational benefits must contact MCC's VA Certifying Official in the Registrar's Office to ensure that all necessary paperwork has been processed. GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at [www.benefits.va.gov/gibill](http://www.benefits.va.gov/gibill).

## TUITION RATE FOR VETERANS

MCC charges qualifying Veterans and Dependents at the in-state tuition rate, in accordance with Section 702 of the Veterans Access, Choice and Accountability Act of 2014 ("Choice Act"), for payment of benefits under the Post-9/11 GI Bill and Montgomery GI Bill-Active Duty, and under the following policy (Community College System of New Hampshire finance policies at 421.01.1):

f. A member of the Armed Forces of the United States stationed in New Hampshire under military orders, or stationed in a contiguous state but temporarily living in NH, shall be entitled to classification for himself/ herself, spouse and dependent children as in-state for tuition purposes so long as said orders remain in effect and residence in New Hampshire is continued. Furthermore, military personnel who are residents of another state but choose New Hampshire as their residence within 90 days of being discharged from the military will be considered New Hampshire residents and charged in-state tuition.

g. A veteran, as defined under RSA 21:50, I, or a covered individual, as defined under Chapter 30 or 33 of Title 38 of the United States Code using educational assistance benefits provided under federal law, shall be charged in-state tuition while living in New Hampshire and enrolled in any institution of the Community College System of New Hampshire.

h. A spouse or child using educational assistance benefits provided pursuant to Chapter 30 or 33 of Title 38 of the United States Code shall be charged in-state tuition while living in New Hampshire and enrolled in any institution of the Community College System of New Hampshire.



# AUTOMOTIVE TECHNOLOGY ASSOCIATE OF APPLIED SCIENCE

Effective Spring 2018 Semester

## Degree Program - First Year

First Year	Fall Semester	TH	LAB	CR
First Year	Fall Semester	TH	LAB	CR
AUTO1011M	Maintenance and Light Repair	2	8	4
AUTO1012M	Electrical Systems	3	9	6
FYE100M	First Year Cornerstone	1	0	1
	Foreign Language/Humanities/Fine Arts Elective	3	0	3
<b>Total</b>		<b>9</b>	<b>17</b>	<b>14</b>

First Year	Spring Semester	TH	LAB	CR
AUTO1021M	Steering and Suspension Systems	3	6	5
AUTO1022M	Electronic Controls	3	6	5
AUTO1023M	Automotive Co-op Work Experience I	0	15	2
	Mathematics Elective	3	0	3
<b>Total</b>		<b>9</b>	<b>27</b>	<b>15</b>

First Year	Summer Session	TH	LAB	CR
AUTO1031M	IC Engine and Systems	2	6	4
AUTO1032M	Brake Systems	2	6	4
AUTO1033M	Automotive Co-op Work Experience II	0	15	2
	Open Elective	3	0	3
<b>Total</b>		<b>7</b>	<b>27</b>	<b>13</b>

## Degree Program - Second Year

Second Year	Fall Semester	TH	LAB	CR
AUTO2011M	Manual Transmissions and Drivetrains	2	6	4
AUTO2012M	Powertrain Management Systems	2	6	4
AUTO2013M	Climate Control Systems	2	6	4
ENGL110M	College Composition I	4	0	4
<b>Total</b>		<b>10</b>	<b>18</b>	<b>16</b>

Second Year	Spring Semester	TH	LAB	CR
AUTO2021M	Automotive Co-op Work Experience III	0	15	2
AUTO2022M	Automatic Transmission and Transaxles	2	8	4
AUTO2023M	Vehicle Performance Diagnosis	2	6	4
	Science Elective	3	0	3
	Social Science Elective	3	0	3
<b>Total</b>		<b>10</b>	<b>29</b>	<b>16</b>
<b>Total Credits - 74</b>				

## COURSE DESCRIPTIONS

### AUTO1021M Steering and Suspension Systems 3-6-5

AUTO1021M is an in-depth study of steering and suspension systems, alignment geometry, and procedures including the service and diagnosis of these systems. This course also includes the latest cutting-edge electronic controlled systems. Using the skills and knowledge learned, students will perform the same procedures, and diagnose system concerns on today's automobiles just as a technician would in an automotive service department. AUTO1021M is a spring semester course. Tools identified on the student tool list are required for this course. Note that for the AEP, MCAP, MLR, and SU pathways, on-line training is required to receive credit for this course. A minimum grade of C is required to continue on to AUTO1031M, AUTO1032M, and AUTO1033M. Prerequisites: Successful completion of AUTO1011M and AUTO1012M with a minimum grade of "C".

### AUTO1022M Electronic Controls 3-6-5

AUTO1022M is an in-depth study of electronic control systems, vehicle communication networks, electronic sensors, output-devices, and operation including diagnosis and repair. Using the skills and knowledge learned, students will perform the same procedures, and diagnose electronic control system concerns on today's automobiles just as a technician would in an automotive service department. AUTO1022M is a spring semester course. Tools identified on the student tool list are required for this course. Note that for the AEP, MCAP, MLR, and SU pathways, on-line training is required to receive credit for this course. A minimum grade of "C" is required to continue on to AUTO1031M, AUTO1032M, and AUTO1033M. Prerequisites: Successful completion of AUTO1011M and AUTO1012M with a minimum grade of "C".

### AUTO1023M Automotive Co-op Work Experience I 0-15-2

The Automotive Co-op Work Experience provides an opportunity for practical experience at an approved site. It is a required component of the degree program and students are required to work a minimum of 320 hours. Periodic supervisor evaluations based on performance and other criteria related to successful employment will be completed and reviewed by the co-op coordinator and site supervisor, and will be the basis for the final grade. AUTO1023M is a spring semester course. Tools identified on the student tool list are required at the co-op site. A minimum grade of "C" is required to continue on to AUTO1031M, AUTO1032M, and AUTO1033M. Prerequisites: Successful completion of AUTO1011M and AUTO1012M with a minimum grade of "C".

### AUTO1031M IC Engine and Systems 2-6-4

AUTO1031M is a comprehensive course including theory, repair and overhaul procedures with an emphasis on diagnosis of internal-combustion engines. This course provides an opportunity to gain the knowledge and skills necessary to diagnose and service today's complex engines and systems. This course includes principles of four-stroke cycle operation, engine related systems, performance diagnosis, service, engine noise diagnosis, and the fundamentals of diesel engine operation. Using the skills and knowledge learned, students will perform the same procedures, and diagnose engine and system concerns on today's automobiles and light trucks just as a technician would in an automotive service department. AUTO1031M is a fall semester course. Tools identified on the student tool list are required for this course. Note that for the AEP, MCAP, MLR, and SU pathways, on-line training may be required to receive credit for this course. A minimum grade of "C" is required to continue on to AUTO2011M, AUTO2012M, and AUTO2013M. Prerequisite: Successful completion of AUTO1011M with a minimum grade of "C".

### AUTO1032M Brake Systems 2-6-4

AUTO1032M is a comprehensive course including theory, repair and service procedures with an emphasis on diagnosis of cutting-edge braking systems. This course includes principles of hydraulics, service brakes, electronic braking systems and controls. This course provides an opportunity to gain the knowledge and skills necessary to diagnose and service today's complex brake systems. Using the skills and knowledge learned, students will perform the same procedures, and diagnose brake and related system concerns on today's automobiles and light trucks just as a technician would in an automotive service department. AUTO1032M is a summer semester course. Tools identified on the student tool list are required for this course. Note that for the AEP, MCAP, MLR, and SU pathways, on-line training may be required to receive credit for this course. Prerequisites: Successful completion of AUTO1011M, AUTO1012M, and AUTO1022M with a minimum grade of "C".

# CATALOG ADDENDUM 2017-2018

## **AUTO1033M Automotive Co-op Work Experience II 0-15-2**

The Automotive Co-op Work Experience provides an opportunity for practical experience at an approved site. It is a required component of the degree program and students are required to work a minimum of 240 hours. Periodic supervisor evaluations based on performance and other criteria related to successful employment will be completed and reviewed by the co-op coordinator and site supervisor, and will be the basis for the final grade. AUTO1033M is a summer semester course. Tools identified on the student tool list are required at the co-op site. A minimum grade of "C" is required to continue on to AUTO2011M, AUTO2012M, and AUTO2013M. Prerequisites: Authorization from faculty.

## **AUTO2011M Manual Transmissions and Drivetrains 2-6-4**

AUTO2011M is a comprehensive course including theory, repair and service procedures with an emphasis on diagnosis of manual transmissions and drivetrains. This course includes the theory of operation, service and repair, diagnosis and controls. This course provides an opportunity to gain the knowledge and skills necessary to diagnosis and service today's complex transmissions. Using the skills and knowledge learned, students will perform the same procedures, and diagnose transmission, drivetrain and related system concerns on today's automobiles and light trucks just as a technician would in an automotive service department. AUTO2011M is a fall semester course. Tools identified on the student tool list are required for this course. Note that for the AEP, MCAP, MLR, and SU pathways, on-line training may be required to receive credit for this course. Prerequisites: Successful completion of AUTO1011M with a minimum grade of "C".

## **AUTO2012M Powertrain Management Systems 2-6-4**

AUTO2012M is a comprehensive course including theory, repair and service procedures with an emphasis on diagnosis of modern powertrain management systems. This course includes computers, fuel systems and service, exhaust gas analysis, emission control systems and service. This course provides an opportunity to gain the knowledge and skills necessary to diagnose and service today's complex powertrain systems. Using the skills and knowledge learned, students will perform the same procedures, and diagnose powertrain and related system concerns on today's automobiles and light trucks just as a technician would in an automotive service department. AUTO2012M is a fall semester course. Tools identified on the student tool list are required for this course. Note that for the AEP, MCAP, MLR, and SU pathways, on-line training may be required to receive credit for this course. Prerequisites: Successful completion of AUTO1012M, AUTO1022M, and AUTO1031M with a minimum grade of "C".

## **AUTO2013M Climate Control Systems 2-6-4**

AUTO2013M is a comprehensive course including theory, repair and service procedures with an emphasis on diagnosis of advanced climate control systems. This course includes operating principles of refrigerant systems, air management, electronic controls, micro climates and EPA federal regulations. This course provides an opportunity to gain the knowledge and skills necessary to diagnose and service today's complex climate control systems. Using the skills and knowledge learned, students will perform the same procedures, and diagnose climate control and related system concerns on today's automobiles and light trucks just as a technician would in an automotive service department. EPA certification is also a requirement to complete this course. Auto2013M is a fall semester course. Tools identified on the student tool list are required for this course. Note that for the AEP, MCAP, MLR, and SU pathways, on-line training may be required to receive credit for this course. Prerequisites: Successful completion of AUTO1011M, AUTO1012M, and AUTO1022M with a minimum grade of "C".

## **AUTO2021M Automotive Co-op Work Experience III 0-15-2**

The Automotive Co-op Work Experience provides an opportunity for practical experience at an approved site. It is a required component of the degree program and students are required to work a minimum of 320 hours. Periodic supervisor evaluations based on performance and other criteria related to successful employment will be completed and reviewed by the co-op coordinator and site supervisor, and will be the basis for the final grade. AUTO2021M is a spring semester course. Tools identified on the student tool list are required at the co-op site. Prerequisites: Successful completion of AUTO2011M, AUTO2012M and AUTO2013M with a minimum grade of C is required to register for this course. Authorization from faculty.

## **AUTO2022M Automatic Transmission and Transaxles 2-8-4**

AUTO2022M is a comprehensive course including theory, service and overhaul procedures with an emphasis on diagnosis of automatic transmission, transaxles and electronic controls. This course includes operating principles of hydraulics, mechanical, and electronic controls. This course provides an opportunity to gain the knowledge and skills necessary to diagnosis and service today's complex transmissions and control systems. Using the skills and knowledge learned, students will perform the same procedures, and diagnose automatic transmission and related system concerns on today's automobiles and light trucks just as a technician would in an automotive service department. AUTO2022M is a spring semester course. Tools identified on the student tool list are required for this course. Note that for the AEP, MCAP, MLR, and SU pathways, on-line training may be required to receive credit for this course. Prerequisites: Successful completion of AUTO1011M, AUTO1012M, and AUTO1022M with a minimum grade of "C".

## **AUTO2023M Vehicle Performance Diagnosis 2-6-4**

AUTO2023M is a course focused on diagnosis and resolving problems with today's advanced vehicles and systems. This course includes diagnosis techniques, the diagnostic process, and finding the root cause of customer concerns. This course provides an opportunity to gain the knowledge and skills necessary to diagnosis and correct problems with today's complex vehicles. Using the skills and knowledge learned, students will perform the same procedures, and diagnose concerns on today's automobiles and light trucks just as a technician would in an automotive service department. AUTO2023M is a spring semester course. Tools identified on the student tool list are required for this course. Note that for the AEP, MCAP, MLR, and SU pathways, on-line training may be required to receive credit for this course. Prerequisites: Successful completion of AUTO2012M with a minimum grade of "C".

## **WELD224M Intermediate GTAW of Pipe 0-4-2**

This course introduces the fundamental concepts of welding with Gas Tungsten Arc Welding (GTAW) on Carbon steel, Stainless steel and Aluminum Pipe. Skills will be developed in all pipe positions, 1G, 2G, 5G and 6G. Topics covered will include: open root welds, backing ring welds, consumable insert welds, and back purged welds. Prerequisite: WELD211M. Corequisite: WELD221M.