



Automotive
Building
Carpentry
Early Childhood Ed
Engineering
Fashion & Beauty
Hospitality Plus
Mechatronics
Multi Skills
Radio
Tourism Plus

Welcome to the Automotive Academy

Nau mai ki te Whare Aronui o Tiriwa. The Automotive Academy welcomes you.

The AWVA Automotive Academy is offered over two school years for two periods per day. The course work is taught in partnership with Unitec (1 day per week over 18 weeks at the Unitec campus in Year 2). There are over 100 credits available over the duration of the course, all count towards the NCEA. A student must still select three other subject options for each of the two years. Students will also be encouraged to be part of the **Evolocity Electric Bike Competition** group.

Year 1 is made up of Level 2 standards and Year 2 is made up of Level 2 and Level 3 standards, most will be delivered by Mito through their Ignition and Accelerate programme and some of which are delivered by Unitec.

Highlight of Year 1

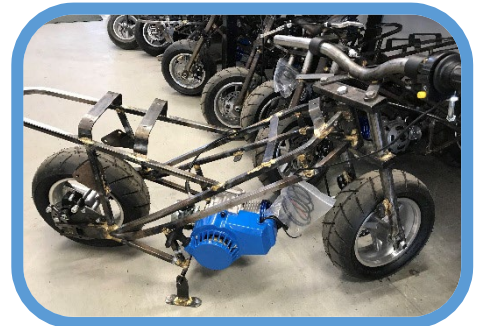
Students will build a mini motorcycle which they are able to take home on completion of the course, free of charge.

Highlights of Year 2

Students will attend Unitec and work in the tertiary level environment. Also, students will build a motorized Go Kart at school. (There is a charge to cover the cost of the motor. Students can take the Kart home when finished). There will also be practical work at Massey High School, students will learn how to strip tyres and carry out puncture repairs and how to balance wheels. On car maintenance will also be taught with the use of our two-post hoist. Years 13 students are encouraged to do work experience which can lead to employment opportunities.

Successful completion of this course will allow students entry into a Polytechnic Level 3 course in any applied technology such as Automotive, Engineering, Carpentry qualification, or assist in gaining an apprenticeship. Students will have the opportunity to gain the following certificates.

Level 2 NCEA endorsed with the Manufacturing and Technology Sector Vocational Pathway Award or Level 2 NCEA without the vocational pathway award.



The below table is a list of the intended standards covered in the course. **The actual year the standard is covered is an indication but could vary.**

Automotive Academy Year 1, Level 2 (2 hours per day)

Standard	Ver	Level	Domain	Brief Description	Int or Ext	Credits	R/SR
US 21669	4	2	Motor Industry – Intro Skills	Demonstrate knowledge of hand tools and workshop equipment for motor industry applications	I	2	SR
US 21671	2	2	Automotive Workshop Engineering	Carry out general engineering tasks in the motor industry	I	4	SR
US 21682	2	2	Automotive Workshop Engineering	Demonstrate knowledge of an oxy-acetylene welding plant in the motor industry	I	2	SR
US 21687	3	2	Engines	Demonstrate knowledge of basic tuning of a 4-stroke engine	I	3	
US 21692	2	2	Automotive Fuel Systems & Exhaust	Perform minor servicing tasks on a Diesel fuel system	I	2	
US 21722	1	2	Tyres	Balance wheels off a vehicle in the motor industry.	I	2	
AS 91344	4	2	Construction & Mechanical Technologies	Implement advance procedures to integrate parts using resistant materials to make a specified product with special features	I	6	
Total Number of Credits Available in this Course (all Level 2)						21	42
MITO Ignition Programme							
US 21718	2	2	Automotive Workshop Engineering	Demonstrate knowledge of hazardous materials used in motor industry	I	2	
US 21857	3	2	Motor Industry – Intro Skills	Identify occupational areas & structure of the NZ Motor Industry	I	2	
US 29576	1	3	Collision repair	Demonstrate knowledge of digital imaging required in the collision repair industry.	I	1	
US 29578	1	3	Collision repair	Demonstrate knowledge of automatic braking, steering & suspension system components in the collision repair industry.	I	3	
US 29579	1	2	Motor Industry – Intro Skills	Demonstrate knowledge of good work habits & safe work practices in the automotive industry	I	4	
US 29580	2	2	Motor Industry – Intro Skills	Demonstrate good work habits & safe work practices in the automotive industry	I	4	
US 30475	1	2	Motor Industry – Intro Skills	Demonstrate knowledge of the motor industry engineering tasks	I	2	
US 30476	1	2	Motor Industry – Intro Skills	Demonstrate knowledge of tools & equipment used in the motor industry.	I	2	
						20	
This is a "Unit Standards Only" course.							

Automotive Academy Year 2, Level 2 & 3 (2 hours per day)

AS 91620	4	3	Construction & Mechanical Technology	Implement complex procedures to integrate parts using resistant materials to make a specified product	I	6	
AS 91624	3	3	Construction & Mechanical Technology	Demonstrate understanding of a structural system	I	3	
AS 91625	3	3	Construction & Mechanical Technology	Demonstrate understanding of a complex machine	I	3	
						12	
MITO Accelerate Programme							
US 21869	5	2	Automotive Preventative Maintenance	Remove & refit road wheels on a vehicle		1	
US 30434	1	3	Automotive Preventative Maintenance	Service a vehicle or machine		3	
US 30435	1	3	Automotive fuel systems & exhaust	Demonstrate knowledge of vehicle emissions		4	
US 30436	1	3	Automotive fuel systems & exhaust	Demonstrate knowledge of an electronic fuel injection system		2	
US 30437	1	3	Automotive fuel systems & exhaust	Demonstrate knowledge of the operation of a Diesel fuel system		2	
US 30477	1	3	Engines	Demonstrate knowledge of petrol & diesel engines		4	
US 30478	1	2	Motor Industry – Intro Skills	Demonstrate knowledge of automotive lubricants		2	
US 30570	1	3	Automotive workshop engineering	Demonstrate knowledge of welding in the automotive industry		3	
Total Number of Credits Available in this Course						21	
This is a "Unit Standards Only" course.							

Automotive Academy Year 2, Level 2 (Done at Unitec)

US 21707	2	2	Motor Industry – Intro Skills	Demonstrate knowledge of automotive electrical principles	I	6	SR
US 883	4	3	Motor Industry – Intro Skills	Check adjust front and rear wheel alignment	I	4	
US 24807	1	3	Motor Industry – Intro Skills	Remove, disassemble, inspect, reassemble. and refit engine head	I	4	
US 24275	2	3	Motor Industry – Intro Skills	Disassemble, inspect, reassemble an engine short block	I	3	
US 24306	2	3	Engines	Carry out general repairs to a short block	I	3	
US 942	5	3	Automotive Preventative Maintenance	Pre- delivery check	I	3	
Total Number of Credits Available in this Course (6 credits L2, 17 Level 3)						23	6
This is a "Unit Standards Only" course.							

Vocational Pathways Award within the Academies.

All the standards in Academy courses contribute to the NCEA. Students in the academies at Level 2 are also eligible for the Vocational Pathways Award. To get a Vocational Pathways Award, the student must gain Level 2 NCEA with a minimum of 20 Level 2 credits from Sector-Related, (SR), standards, (within that sector), and a further minimum of 40 credits from Recommended, (R), standards, (also within that sector), to make up a total of 60 pathway credits. (See tables). The SR standards are generally achieved within the academy and the R standards come from some academy standards plus standards in other subjects.

The Vocational Pathways Award enables employers to assess whether potential employees' skills align with their industry requirements more easily. The six Vocational Pathways sectors are: Constructions & Infrastructure (CI), Manufacturing & Technology (MT), Primary Industries (PI), Service Industries (SI), Social & Community Services (SC) and Creative Industries (CR). Note this award only applies to Level 2.

Diagram showing the minimum needed for the Vocational Pathways award.

Fees and Transport. Our academy courses are fees free, apart from some uniform items. The Automotive Academy at Level 3 also involves days at Unitec Mt Albert, during which the students will be taught by the Unitec tutors and gain credits delivered by this NZQA approved tertiary provider. Transport to and from Unitec is provided free from MHS.



Entry and commitment from students. All students who wish to apply for this academy must complete an AWVA application form, plus indicate their choice of the Automotive Academy Pathway on the MHS Pathways online course selection. Places will be limited, and an interview process will be arranged with the student and their whanau or support person and the MHS academy tutor. Students will need to be committed to maintaining their attendance at 95% and to getting the bus at MHS to Unitec, on the designated days.

Course structure. Both Years one and two are two hours a day, five days a week. The current existing standards are listed in the following tables.

Individual education plans, IEPs. All students will have regular IEP meetings to check their progress towards their vocational pathways award and/or NCEA.

Preferred subject choices along with Automotive, Preference for Academy places will be given to students who also choose subjects from this list. **English, Mathematics, Computer Science.**

Students may only select ONE academy.

To apply for an academy, 1. Complete the online MHS course selection process [SchoolPoint Useful Information](#) and select the Academy (AWVA), you wish to apply for. There is an Academy Application form to be completed – select the desired Academy from the drop-down list, **print, take it home and complete it and hand it to one of the staff below. (or get an application form from staff in Academy Office).**

1. See Mr Hackett, Ms. Douglas or Mr Tinling in the Academy Office (Building site carpark).
2. Email Mr Hackett at nhackett@masseyhigh.school.nz.



AUTOMOTIVE ACADEMY

Recommended
School Subjects
for UE

- English 201
- 2 other UE approved subjects

MANUFACTURING AND TECHNOLOGY VOCATIONAL PATHWAY

Recommended School Subjects – Math and Science,
Computer Science

Further Study
Options with UE

Career Options
from Academy

Apprenticeships

- Automotive Dismantler
- Automotive Electrician
- Automotive Engineer
- Automotive Heavy Engineering.
- Automotive Refinisher
- Automotive Technician
- Bicycle Mechanic
- Brake Servicing Management
- Car Groomer
- Collision Repair Technician
- Forklift Engineering
- Heating & Ventilation
- Marine Engineer
- Motorcycle Engineer
- Motorcycle Engineering
- Panel beater
- Parts Merchandiser
- Power Boat Servicing
- Service Station Forecourt attendant.
- Toolmaker
- Tyre Fitter
- Vehicle Sales
- Vehicle Trimmer

- Defense Forces
- MITO

Unitec

- Bachelor of Applied Technology – specialise in Auto Engineering

Further Study Options
without UE.

Unitec

- Certificate in Applied Technology – Marine Engineering
- Certificate in Applied Technology – Auto Engineering
- Certificate in Applied Technology – Autotronics
- Certificate in Auto and Mechanical Engineering

MIT

- Certificate in Auto Technology
- Certificate in Auto Electrical
- Certificate in Motorsports
- Certificate in Light Auto Technology
- Certificate in Vehicle Refinishing Technology
- National Certificate in Welding
- National Certificate in Mechanical Engineering
- National Certificate in Engineering Fabrication

