

AUTOMOTIVE INDUSTRY MANAGEMENT (AIM)

A grade of C or better is required for prerequisite courses.

AIM 105 AIM and College Life 1(1-0)

Fall, Spring.

Introduction to the industry from viewpoint of history, social impact, and future growth. Provide student exposure to AIM program policies and procedures, campus resources and college life.

Prerequisite: None.

Corequisite: None.

Registration Information: None.

AIM 110 Automotive Otto-Cycle Engines I MLR 1(1-0)

Fall.

Design and operational theory of Otto cycle automotive gasoline engines.

Prerequisites: None.

Corequisites: AIM 110L.

Registration Information: None.

AIM 110L Automotive Otto-Cycle Engines I MLR Lab 2(0-4)

Fall.

Practical experience with MLR related engine tasks focusing on compression, lubrication, cooling system and camshaft/timing belt service.

Prerequisites: None.

Corequisites: AIM 110.

Registration Information: None.

AIM 120 Automotive Electrical Systems I MLR 2(2-0)

Fall.

Design, theory and operation of electrical/electronic fundamentals including Ohm's law, series & parallel circuits, AC, DC, engine electrical systems; battery, starting, charging and inclusive of accessory system.

Prerequisite: None.

Corequisite: AIM 120L.

Registration Information: None.

AIM 120L Automotive Electrical Systems I Lab MLR 2(0-4)

Fall.

Practical experience with MLR-related automotive electrical systems service focused on engine electrical systems; battery, starting, charging and inclusive of accessory electrical systems.

Prerequisite: None.

Corequisite: AIM 120.

Registration Information: None.

AIM 130 Automotive Brake Systems MLR 1(1-0)

Spring.

Design and operational theory of automotive brake systems.

Prerequisite: None.

Corequisite: AIM 130L.

Registration Information: None.

AIM 130L Automotive Brake Systems MLR Lab 2(0-4)

Spring.

Practical experience with MLR-related automotive brake systems service.

Prerequisite: None.

Corequisite: AIM 130.

Registration Information: None.

AIM 155 Automotive Parts Operations 4(4-0)

As Needed.

Study of automotive industry management theory and styles of store operations including customer service skills, associate interaction, managerial responsibilities. Product and parts catalog knowledge/advertising.

Prerequisite: None.

Corequisite: None.

Registration Information: None.

AIM 160 Automotive Manual Transmissions & Drive Lines MLR 1(1-0)

Spring.

Design and operational theory of manually shifted helical geared transmissions, clutches & remaining drive line including final drives.

Prerequisite: None.

Corequisite: AIM 160L.

Registration Information: None.

AIM 160L Auto Manual Transmissions & Drive Line MLR Lab 1(0-2)

Spring.

Practical experience with MLR-related automotive automatic transmission service.

Prerequisite: None.

Corequisite: AIM 160.

Registration Information: None.

AIM 210 Automotive Engine Performance MLR 2(2-0)

Fall.

Design, theory and operation of gasoline engine performance related to: compression, volumetric efficiency, thermal efficiency, operating temperature, ignition timing, air/fuel mixture ratio and exhaust emissions.

Prerequisite: AIM 110 and AIM 110L and AIM 120 and AIM 120L.

Corequisite: AIM 210L.

Registration Information: None.

AIM 210L Automotive Engine Performance MLR Lab 2(0-4)

Fall.

Practical experience with MLR-related automotive engine performance service.

Prerequisite: AIM 110 and AIM 110L and AIM 120 and AIM 120L.

Corequisite: AIM 210.

Registration Information: None.

AIM 220 Automotive Electrical Systems II MLR/AST 2(2-0)

Spring.

Theory, design and operation of digital/electronic managed automotive systems including OBD II, engine, drive train, brakes, vehicle stability, traction control, accessories and HVAC.

Prerequisite: AIM 120 and AIM 120L.

Corequisite: AIM 220L.

Registration Information: None.

AIM 220L Automotive Electrical Systems II MLR/AST Lab 2(0-4)

Spring.

Practical experience with automotive electrical systems service focused digital/electronic management systems related to OBD II, engine, drive train, brakes, vehicle stability, traction control, OBD II, accessories, HVAC.

Prerequisite: AIM 120 and AIM 120L.

Corequisite: AIM 220.

Registration Information: None.

AIM 230 Automotive Suspension & Steering Systems MLR 1(0-1)

Spring.

Design and operational theory of automotive suspension and steering systems.

Prerequisite: None.

Corequisites: AIM 230L.

Registration Information: None.

AIM 230L Automotive Suspension & Steering Systems MLR Lab 2(0-4)

Spring.

Practical experience with MLR-related automotive suspension & steering service.

Prerequisite: None.

Corequisites: AIM 230.

Registration Information: None.

AIM 260 Automotive Automatic Transmission/Transaxles MLR 1(1-0)

Spring.

Design and operational theory of automotive planetary geared automatic transmissions.

Prerequisite: AIM 160 and AIM 160L.

Corequisites: AIM 260L.

Registration Information: None.

AIM 260L Auto Automatic Transmission/Transaxle MLR Lab 1(0-2)

Spring.

Practical experience with MLR-related planetary geared automatic transmission/transaxle service.

Prerequisite: AIM 160 and AIM 160L.

Corequisites: AIM 260.

Registration Information: None.

AIM 265 Automotive Parts Management Systems 4(3-2)

As Needed.

Introduce students to aftermarket store operations, inventory and distribution management. Emphasis is on hands-on store operations, business contacts, job placement and internship.

Prerequisite: AIM 105 and AIM 155.

Corequisite: None.

Registration Information: None.

AIM 296 Cooperative Education Placement (1-5 V)

Fall, Spring.

Supervised industrial field work.

Prerequisite: None.

Corequisite: None.

Registration Information: AIM major only.

AIM 305 Regulatory, Enviro, Health Issues 3(3-0)

As Needed.

A study of automotive regulatory issues to include, OSHA, SDS, RTK, health and environmental issues.

Prerequisite: None.

Corequisite: None.

Registration Information: None.

AIM 325 Fuels & Lubrication Prod, Market, & Conservation 3(3-0)

As Needed.

Petroleum industry; basic production processes, marketing techniques, alternate fuel sources, and conservation techniques.

Prerequisite: None.

Corequisite: None.

Registration Information: None.

AIM 345 Advanced Automotive Systems 5(3-4)

As Needed.

Theory and lab experience on new concepts in automotive electrical, fuel and suspension systems.

Prerequisite: AIM 125 and AIM 125L and AIM 165 and AIM 165L and AIM 235 and AIM 235L and AIM 255 and AIM 255L.

Corequisite: None.

Registration Information: None.

AIM 355 Automotive Shop Practices 5(2-6)

Spring.

Diagnosis of electrical, fuel, engine, brake and transmission systems; study of service management and service writer duties.

Prerequisite: AIM 125 and AIM 125L and AIM 165 and AIM 165L and AIM 235 and AIM 235L and AIM 255 and AIM 255L and AIM 345.

Corequisite: None.

Registration Information: None.

AIM 405 Personal Selling Methods and Techniques 4(3-2)

As Needed.

Research, preparation and presentation methods and techniques for selling in the automotive milieu.

Prerequisite: None.

Corequisite: None.

Registration Information: None.

AIM 425 Automotive Financial Management 5(4-2)

As Needed.

Introduction to dealership operations, financial management and analysis of OEM. Emphasis to develop experience through job placement and internship.

Prerequisite: AIM 155 and AIM 265.

Corequisite: None.

Registration Information: None.

AIM 490 Special Projects (1-5 V)

As Needed.

Special interest area.

Prerequisite: None.

Corequisite: None.

Registration Information: Repeatable (10).

AIM 491 Special Topics (1-5 V)

As Needed.

Special Topics.

Prerequisite: None.

Corequisite: None.

Registration Information: Repeatable (10).

AIM 495 Independent Study (1-4 V)

As Needed.

Directed, independent study of topics agreed upon by the student and instructor.

Prerequisite: None.

Corequisite: None.

Registration Information: Repeatable (10).

AIM 496 Cooperative Education Placement (1-5 V)

As Needed.

Supervised industrial field work.

Prerequisite: None.

Corequisite: None.

Registration Information: Junior or senior standing. AIM major only.

Repeatable (10).