



# Wayne County Community College District

## COURSE SYLLABUS

### AUT 155 Introduction to Hydrogen Applications and Safety

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**CREDIT HOURS:** 4.00

**CONTACT HOURS:** 60.00

**COURSE DESCRIPTION:**

This course will give the student an understanding of the properties of hydrogen, its use as a fuel for internal combustion engines and fuel cells, and the storage, transportation and safety considerations, enabling the student to obtain employment as an alternative fuel or advanced technology vehicle technician.

**Lab Fee**

**PREREQUISITES:** AUT 117

**EXPECTED COMPETENCIES:**

Upon successful completion of this course, the student will:

- Demonstrate knowledge of safety in all areas of fuel cell electric power generation for electric drive vehicle maintenance;
- Explain principles of operation for fuel cell electric power generation for electric drive vehicle systems;
- Describe various fuel cell electric power generation systems and components and their relationship to electric drive vehicle system operation;
- Explain principles of operation for fuel cell electric power generation in electric drive vehicle systems; and
- Compare and contrast different types of fuel cell electric power generation systems found in electric drive vehicles.

**ASSESSMENT METHODS:**

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

**GRADING SCALE:**

90%-100% = A  
80%-89.9% = B  
70%-79.9% = C  
60%-69.9% = D  
<60% = E