

# Madonna University

## Fire Science • College of Science and Mathematics

### About the Program

#### Overview

The Fire Science program deals with the history of fire protection practices and problems of fire suppression. It also covers fire and arson investigations, which include the methods and mechanics of protecting, searching, and controlling fire scenes.

#### Department history

The Fire Science major was introduced to the University in 1972.

#### Unique features

- Qualified faculty who are practitioners in the field of fire science
- Opportunity to gain on-the-job experience through cooperative education placements and internships

NOTE: Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

### Fire Science Major: Bachelor of Science

#### Required Major Courses:

FS 1010	Intro to Fire Protection and Prevention	3 s.h.
FS 2150	Building Construction	3 s.h.
FS 2910	Cooperative Education I*	
<b>OR</b>		
FS 2930	Internship I*	1-3 s.h.
FS 3500	Hydraulics and Water Supply	3 s.h.
FS 3680	Fire Protection Systems I	3 s.h.
FS 3690	Fire Protection Systems II	3 s.h.
FS 3910	Cooperative Education II** <b>OR</b>	
FS 3930	Internship II**	1-3 s.h.
FS 4400	Tactics and Strategy	3 s.h.
FS 4510	Hazardous Materials I (OSH*)	3 s.h.
FS 4950	Senior Seminar	2 s.h.
	Major Electives	<u>1-5 s.h.</u>
	<b>Total</b>	<b>30 s.h.</b>

#### Required Support Courses:

CHM 1110	General Chemistry I	4 s.h.
MTH 1050	<b>AND</b> 1060 Intermediate Algebra <b>and</b> Trigonometry <b>OR</b>	
MTH 1210	Precalculus	5-7 s.h.
PHY 2530	General Physics I	4 s.h.
PHY 2540	General Physics II	<u>4 s.h.</u>
	<b>Total</b>	<b>17-19 s.h.</b>

### Fire Science Certificate of Achievement

#### Required Certificate Courses:

ENG 1010	College Composition I	3 s.h.
FS 1010	Intro to Fire Protection and Prevention	3 s.h.
FS 2150	Building Construction	3 s.h.
FS 3500	Hydraulics and Water Supply	3 s.h.
FS 3680	Fire Protection Systems I	3 s.h.
FS 3690	Fire Protection Systems II	3 s.h.
FS 4510	Hazardous Materials I (OSH*)	3 s.h.
	Certificate electives	<u>9 s.h.</u>
	<b>Total</b>	<b>30 s.h.</b>

### Fire Science Major: Associate of Science

#### Required Major Courses:

FS 1010	Intro to Fire Protection and Prevention	3 s.h.
FS 2150	Building Construction	3 s.h.
FS 2910	Cooperative Education I*	
<b>OR</b>		
FS 2930	Internship I*	1-3 s.h.
FS 3500	Hydraulics and Water Supply	3 s.h.
FS 3680	Fire Protection Systems I	3 s.h.
FS 3690	Fire Protection Systems II	3 s.h.
FS 4400	Tactics and Strategy	3 s.h.
FS 4510	Hazardous Materials I (OSH*)	3 s.h.
	Major Electives	<u>0-2 s.h.</u>
	<b>Total</b>	<b>24 s.h.</b>

#### Required Support Courses:

CHM 1110	General Chemistry I	4 s.h.
MTH 1050	<b>AND</b> 1060 Intermediate Algebra <b>and</b> Trigonometry <b>OR</b>	
MTH 1210	Precalculus	5-7 s.h.
PHY 2530	General Physics I	4 s.h.
PHY 2540	General Physics II	<u>4 s.h.</u>
	<b>Total</b>	<b>17-19 s.h.</b>

\*Required for preservice associate and baccalaureate students.

\*\*Required for preservice baccalaureate students.

### Fire Science Minor

#### Required Minor Courses:

FS 1010	Intro to Fire Protection and Prevention	3 s.h.
FS 2150	Building Construction	3 s.h.
FS 3500	Hydraulics and Water Supply	3 s.h.
FS 3680	Fire Protection Systems I	3 s.h.
FS 4510	Hazardous Materials I (OSH*)	3 s.h.
	Minor Electives	<u>5 s.h.</u>
	<b>Total</b>	<b>20 s.h.</b>



## **For Undergraduate Admissions Information**

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## **For Program Information**

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## **Where Grads Are Found**

Grads may be found serving in fire departments in Wayne, Oakland, Monroe, Macomb, Washtenaw, and Livingston counties. They can also be found in organizations such as Ford Motor Company, General Motors, Detroit Metro Airport, and Beaumont Hospital.

## **The Faculty**

Practitioners who serve as faculty come from organizations such as:

- Dearborn Fire Department
- West Bloomfield Fire Department
- Walled Lake Fire Department
- Royal Oak Fire Department
- BASF Wyandotte
- Monroe Fire Department

Madonna University reserves the right to withdraw or modify information in this brochure.

See Advisor/Admissions Office for current information.

Madonna University guarantees the right to equal educational opportunity without discrimination because of race, religion, sex, national origin, age, or disabilities.