

Fire Fighter Technology (FFT)

FFT 1510 Introduction to Fire Protection3 Credit Hours

English/ESL Placement: Placement into ENG 1055 or higher (or placement into ESL 1011 or higher for students taking the ESL sequence of courses.)

The student will review the historical practices of fire prevention, identify the roles of fire service in society, both in the public and private sector. The structure of fire service organizations and basic field equipment will be identified through lecture and discussion methods as well as field trips. Job opportunities and necessary qualifications will be addressed. BILLABLE CONTACT HOURS: 3

FFT 1520 Fundamentals of Fire Prevention3 Credit Hours

English/ESL Placement: Placement into ENG 1055 or higher (or placement into ESL 1011 or higher for students taking the ESL sequence of courses.)

The student will learn inspection, surveying and mapping techniques; recognition of fire hazards; ways of engineering solutions to hazards; and enforcement of solutions. BILLABLE CONTACT HOURS: 3

FFT 1530 Fire Arson Investigation 3 Credit Hours

English/ESL Placement: Placement into ENG 1510 or ESL 2520.

The student will learn: the role of the fire science/safety specialist in arson investigation; methods and mechanics of protecting, searching and controlling fire scenes; rules of determining point of origin and ignition sources; preservation of evidence; case preparation and court testimony; and Michigan and national arson codes. BILLABLE CONTACT HOURS: 3

FFT 1540 Hazardous Materials 3 Credit Hours

English/ESL Placement: Placement into ENG 1510 or ESL 2520.

The student will learn various fire fighting methods relating to hazardous materials, including solids, liquids and gases. Students will also be able to identify the proper storage facilities for these materials. Consideration will be given to the laws, standards and handling techniques of hazardous materials. BILLABLE CONTACT HOURS: 3

FFT 1550 Fire Protection Systems and Equipment3 Credit Hours

English/ESL Placement: Placement into ENG 1510 or ESL 2520.

The student will review the concepts of fire protection systems. Study of the different extinguishing agents and their applications. Emphasis will be placed on sprinkler systems, automatic detection systems and principal alarm systems. BILLABLE CONTACT HOURS: 3

FFT 2510 Fire Service Hydraulics and Water

Supply 3 Credit Hours

English/ESL Placement: Placement into ENG 1510 or ESL 2520.

This course examines the uses of water as the primary fire extinguishing agent. The physical characteristics of water, how it reacts at pressure and temperature changes and the history of water delivery to present day distribution systems will also be reviewed. Fire department pumps and component parts will be explained to demonstrate proper engine pressures to overcome friction loss in hoselines and deliver the proper working pressure to nozzles and other water delivery devices. BILLABLE CONTACT HOURS: 3

FFT 2520 Fire Service Administration3 Credit Hours

English/ESL Placement: Placement into ENG 1510 or ESL 2520.

Organization, supervision and effective management of modern Fire Department. Survey of municipal fire problems, insurance rates, legal aspects of fire prevention records and measurements of results.

BILLABLE CONTACT HOURS: 3

FFT 2530 Building Construction for Fire Service 3 Credit Hours

English/ESL Placement: Placement into ENG 1510 or ESL 2520.

The student will learn the fundamentals of Building Construction and Design, protection features, special considerations, and all the terms associated with building construction concerning the fire protection field.

BILLABLE CONTACT HOURS: 3

FFT 2540 Fire Fighting Tactics and Strategy3 Credit Hours

English/ESL Placement: Placement into ENG 1510 or ESL 2520.

The student will review the behavior of fire, equipment, manpower and other available resources. Basic Fire Fighting Tactics and Strategy, methods of attack and preplanning possible fire target areas. BILLABLE CONTACT HOURS: 3

FFT 2560 Legal Considerations for the Fire Service 3 Credit Hours

English/ESL Placement: Placement into ENG 1510 or ESL 2520.

This course introduces federal, state and local laws that regulate the fire service, national standards influencing the fire services, standard of care, tort, liability and a review of relevant court cases. The course will focus on legal issues confronting the fire service today, with an emphasis on Michigan law for tort liability. Topics include fire service liability issues, the jurisdiction of MIOSHA over fire departments, the applicability of the Federal Fair Labor Standards Act, search and seizure, employment discrimination, sexual harassment and third party liability. BILLABLE CONTACT HOURS: 3