

**Justice Institute of British Columbia**  
**COURSE OUTLINE**

<b>Course Code:</b>	HZM120
<b>Course Title:</b>	Hazardous Materials Emergency Response - Technician
<b>Prerequisite Courses:</b>	HZM100 Hazardous Materials Emergency Response – Awareness ( <i>formerly known as FS124</i> )  HZM110 Hazardous Materials Emergency Response – Operations ( <i>formerly known as FS128</i> )
<b>School:</b>	Public Safety & Security
<b>Division/Academy/Centre:</b>	Fire & Safety
<b>Previous Course Code &amp; Title:</b>	FS129 Hazardous Materials Emergency Response - Technician
<b>Course First Offered:</b>	unknown

<b># of Credits:</b>	<b>3.0</b>
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**Course Description:**

This course is the third level of hazmat training and focuses on managing and implementing emergency response operations. Students develop action plans that focus on various strategic goals and assigning tactical objectives. Students will learn how to deal with unknown products or unknown substances, such as white powder calls. The course will cover monitoring & monitoring equipment, cleanup of hazardous spills, and other topics. This course is accredited by IFSAC and ProBoard in compliance to NFPA 472 (2013 edition) for Technician Level.

**Course Goal(s):** Participants will gain the skills and knowledge to successfully manage releases or potential releases of Hazardous materials. Participants will use specialized chemical protective equipment and product control equipment to terminate releases.

**Learning Outcomes:**

Upon successful completion of this course, the learner will be able to:

1. Analyze a hazardous materials/WMD incident to determine the complexity of the problem and potential outcomes
2. Plan a response within the capabilities of available personnel, personal protective equipment, and control equipment
3. Implement the planned response to favorably change the outcomes of the incident and in a manner that is consistent with the standard operating procedures and site safety
4. Evaluate the progress of the planned response
5. Terminate the incident

**Course Topics/Content:**

- Hazardous Materials/WMD Incidents. .
- Chemical Behaviour and Hazards
- Containment Area and Safe Zones.
- Action Planning and Incident Response.
- Personal Protective Equipment and Respiratory Protection.
- Decontamination Procedures and Operations.
- Incident Management.
- Debriefing and Incident Critique.

**Text and Resource Materials:**

**Required:**

International Fire Service Training Association (IFSTA). *Hazardous Materials Technician 1<sup>st</sup> Edition.*

**Recommended:**

**Course Level:**

	First Year		Second Year		Third Year		Fourth Year
	Graduate	X	Other (describe): Professional Continuing Education				

**Equivalent Course(s) within the JIBC:**

N/A

**Class Delivery Methods:**

<b>Delivery Methods</b>	Class Option A (Hours)	Class Option B (Hours)	Class Option C (Hours)	Class Option D (Hours)
Classroom/Lecture/Discussion	14	21		
Simulation/Lab	21	21		
Practicum/Fieldwork				
Online	7			
Correspondence				
<b>Total Class Hours</b>	42	42		

**Comments on Delivery Methods:**

This course is equally balanced between face-to-face classroom instruction and hands-on practical simulations in a safe and controlled environment. The Fire & Safety Division is currently developing a blended model to incorporate online learning as pre-course study.

**Course Grading System:**

	Letter Grades	X	Percentage		Pass/Fail
	Complete/Incomplete		Attendance Only		

<b>Passing Grade:</b>	70%
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**Evaluation Activities and Weighting:**

Final Exam	60%	Assignments	%	Project	%	Capstone Project	%
Midterm Exam	%	Portfolio	%	Participation	%	Other	%
Quizzes/Test	%	Simulations	40%	Practicum	%	TOTAL	100%

**Comments on Evaluation Activities and Weighting:**

This course meets International Fire Service Accreditation Congress (IFSAC) and National Board on Fire Service Professional Qualifications (ProBoard) criteria for accreditation.

Students are evaluated through a written examination and practical skill evaluations to NFPA 472 Standard for Professional Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents (2013 edition) for Technician Level.

Students must receive 70% on the written evaluation and a pass on the practical skill evaluations to successfully complete the course. Students who are unsuccessful in their first attempt in the evaluation components may be granted a second attempt. If successful in the re-write of the written examination, the candidate will achieve certification, but will only be awarded the passing grade for the course. If the student is unsuccessful in their second attempt, he/she will not be permitted to re-take the evaluation component until he/she has taken the entire course again.

**Other Course Guidelines, Procedures and Comments:**

[Fire & Safety Division Accreditation Policies and Operational Guidelines](#) and then click on documents.

View official versions of related JIBC academic regulations and student policies in the *JIBC Calendar* on the following pages of the JIBC website:

**Academic Regulations:**

<http://www.jibc.ca/programs-courses/jibc-calendar/academic-regulations>

- Student Academic Integrity Policy
- Academic Progression Policy
- Admissions Policy
- Academic Appeals Policy

**Student Policies:**

<http://www.jibc.ca/programs-courses/jibc-calendar/student-policies>

- Access Policy
- Harassment Policy – Students
- Student Records Policy
- Student Code of Conduct Policy

Evaluation Policy  
Grading Policy

### **JIBC Core Competencies**

The JIBC promotes the development of core and specialized competencies in its programs. Graduates of our programs will demonstrate high levels of competence in the following areas:

#### **Critical thinking**

Identify and examine issues and ideas; analyze and evaluate options in a variety of fields with differing assumptions, contents and methods.

#### **Communication, oral and written**

Demonstrate effective communication skills by selecting the appropriate style, language and form of communication suitable for different audiences and mediums.

#### **Leadership**

Inspire individuals and teams to reach their potential by embracing innovation through strategic thinking and shared responsibility.

#### **Independent learning**

Show initiative by acting independently in choosing effective, efficient and appropriate applied learning, research and problem solving strategies.

#### **Problem solving**

State problems clearly; effectively and efficiently evaluate alternative solutions; choose solutions that maximize positive and minimize negative outcomes.

#### **Interpersonal relations**

Know and manage oneself; recognize and acknowledge the needs and emotions of others including those with diverse backgrounds and capabilities.

#### **Inter-professional teamwork**

Understand and work productively within and between groups, respect others' perspectives and provide constructive feedback with special attention to inter-professional relationships.

#### **Information literacy**

Recognize and analyze the extent and nature of an information need; efficiently locate and retrieve information; evaluate it and its sources critically, and use information effectively and ethically.