

Fire Protection Engineering Technology

FACULTY

Ron Greenman, 253.680.7346, rgreenman@bates.ctc.edu

Fire protection engineering technicians design and service fire sprinklers, fire alarms, and other types of in-place detection and suppression systems. The program is supplemented by preparation for the NICET examinations, enabling students to choose from four career paths: detection and alarm systems design, sprinkler systems design, special hazards and suppression systems design, and inspection, testing and maintenance.

Associate of Technology Degree: 110 credits

Fire Protection Engineering Technology

Completion Range: 16-19 Months

		Credits/Hours
FPET	091 Occupational Human Relations	3/50
FPET	092 Occupational Communications	3/50
FPET	093 Occupational Math & Science	5.5/94
FPET	094 Occupational Safety	1/16
ECMP	103 Computers: an Engineering Tool	4/65
FPET	101 Intro to FPET	2/33
FPET	102 Codes & Standards	5/85
FPET	110 Intro to System Design	5/85
FPET	115 Drafting Fundamentals I	2.5/40
FPET	121 Sprinkler Design I	4/66
FPET	125 Electrical Fundamentals	3/50
FPET	131 Alarm Design I	9/150
FPET	135 Drafting Fundamentals II	3/50
FPET	161 Project Contracts	4/66
FPET	171 Inspections & Testing I	2/33
FPET	175 Career Advancement Strategies I	1/17
ECMP	271 Graphic Importations	3.5/50
ENGAR	241 CAD I	4/66
ENGAR	242 CAD Applications I	5/87
ENGAR	251 CAD II	4/66
ENGAR	252 CAD Applications II	5/85
FPAS	215 Alarm Design II	5/85
FPAS	233 Detection & Signaling Design	7/115
FPAS	235 Alarm Systems Design III	6/100
FPAS	262 Alarm Systems Design IV	6/100
FPET	275 Career Advancement Strategies II	3/50
FPET	291 Advanced Projects, Applications	6/100
FPITM	201 IT&M Principles	2/33
FPITM	227 FPET Equipment	4/66
FPITM	228 IT&M Notifications	1/17
FPITM	231 Cylinder IT&M	2/33
FPITM	234 Sprinkler System Inspections	4/66
FPITM	236 H2O Delivery System Inspections	4/66
FPITM	237 Testing H2O Systems	3/50
FPITM	238 H2O System I&T Documentation	2/33
FPITM	245 SHS Inspection Theory	4/66
FPITM	246 SHS Inspection, Testing	5/85
FPITM	248 SHS I&T Documentation	2.5/42
FPITM	255 Alarm Inspection Theory	3/50
FPITM	256 Alarm System I&T	2.5/42
FPITM	258 Alarm System I&T Documentation	2/33
FPSH	205 SHS System Materials	4/66
FPSH	206 Extinguishing Agents	4/66
FPSH	210 SHS Site Analysis	3/51
FPSH	212 Detection Systems	3/51
FPSH	225 SHS System Design	6/100
FPSH	265 Special SHS Applications	4/66
FPSS	221 Sprinkler Design II	3/50
FPSS	222 Water & System Requirements	4/66
FPSS	223 Water Supply Analysis & Hydraulics	5/85

Associate of Technology Degree (continued)

FPSS	261 Sprinkler System Layout	8/135
FPSS	263 Distribution & Storage	4/65
FPSS	264 Special Applications	2.5/40

General Education Requirements

	Credits
100-level or> Human Relations – HREL, PSYCH, SOC or CMST	5
100-level or> Communications – ENGL or CMST	5
100-level or> Mathematics – MATH	5

Associate of Applied Science-T Degree: 115-117.5 credits

Fire Protection Engineering Technology

Completion Range: 11-16 Months

Associate of Technology Degree curriculum with the following

General Education Requirements	Credits
100-level or> Human Relations - HREL, PSYC, or SOC (HREL 151, SOC 101, PSY 101, SOC 111, EDU 121)	10
100-level or> Communications - ENGL 101	5
100-level or> Mathematics - MATH 105, MATH 121	5
100-level or> General Education Electives	5

Fire Protection Engineering Technology (continued)

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Certificate of Competency: 78 credits

Fire Protection Technician

		<u>Credits/Hours</u>
FPET	091 Occupational Human Relations	3/50
FPET	092 Occupational Communications	3/50
FPET	093 Occupational Math & Science	5.5/94
FPET	094 Occupational Safety	1/16
FPET	101 Intro to FPET	2/33
FPET	102 Codes & Standards	5/85
ECMP	103 Computers: An Engineering Tool	4/65
FPET	110 Intro to System Design	5/85
FPET	115 Drafting Fundamentals I	2.5/40
FPET	121 Sprinkler Design I	4/66
FPET	135 Drafting Fundamentals II	3/50
FPSS	221 Sprinkler Design II	3/50
FPSS	222 Water & System Requirements	4/66
FPSS	223 Water Supply Analysis & Hydraulics	5/85
ENGAR	241 CAD I	4/66
ENGAR	242 CAD Applications I	5/87
FPES	261 Sprinkler System Layout	8/135
FPES	263 Distribution & Storage	4/66
FPET	161 Project Contracts	4/66
FPET	171 Inspections & Testing I	2/33
FPITM	201 IT&M Principles	2/33
FPITM	227 FPET Equipment	4/66
FPITM	228 IT&M Notifications	1/17
FPITM	231 Cylinder IT&M	2/33
FPITM	234 Sprinkler System Inspections	4/66
FPITM	236 H2O Delivery System Inspections	4/66
FPITM	237 Testing H2O Systems	3/50
FPITM	238 H2O System I&T Documentation	2/33
FPITM	248 SHS I&T Documentation	2.5/42
FPITM	255 Alarm Inspection Theory	3/50
FPITM	256 Alarm System I&T	2.5/42
FPITM	258 Alarm System I&T Documentation	2/33

General Education Requirements

	<u>Credits</u>
90-level or> Human Relations – HREL, PSYCH, SOC or CMST	3
90-level or> Communications – ENGL or CMST	3
90-level or> Mathematics – MATH	3

90-level credit units apply toward meeting certificate requirements, but do not apply toward degree requirements.

Certificate of Training: 44 credits

Fire Protection Engr- Inspection, Testing & Maintenance Tech

Completion Range: 6 Months

		<u>Credits/Hours</u>
FPSM	091 Occupational Human Relations	2/33
FPSM	093 Occupational Math	3/50
FPET	094 Occupational Safety	1/16
FPET	101 Intro to FPET	2/33
FPET	102 Codes & Standards	5/85
ECMP	103 Computers: An Engineering Tool	4/65
FPSM	161 IT&M Contracts	2/33
FPET	171 Inspections & Testing I	2/33
FPITM	201 IT&M Principles	2/33
FPSM	227 FPET Systems & Components	3/50
FPITM	228 IT&M Notifications	1/17
FPSM	234 Sprinkler System Inspections	3/50
FPSM	236 H2O Delivery System Inspections	3/50
FPITM	237 Testing H2O Systems	3/50
FPITM	238 H2O System I&T Documentation	2/33
FPITM	248 SHS I&T Documentation	2.5/42
FPSM	254 Alarm Systems	3/50
FPSM	271 NICET Test Preparation	4/66
FPSM	273 Professional Certification	1.5/25

Bates currently has articulation agreements with four colleges to provide educational options for students seeking a four-year degree in the following career fields: database management, software development, web developer, and fire protection. Please refer to Chapter 1, Degrees & Certificates, in the front of this catalog for more information.