

## Diesel & Heavy Equipment Mechanic

### FACULTY

Bryce Carpenter, 253.680.7437, bcarpenter@bates.ctc.edu  
 Gene Gablehouse, 253.680.7438, ggablehouse@bates.ctc.edu  
 Mick McGuire, 253.680.7436, mmcguire@bates.ctc.edu  
 Ray Shjerven, 253.680.7435, rshjerven@bates.ctc.edu

Students prepare for employment in the diesel and heavy equipment industry, diagnosing, repairing, and rebuilding components of diesel-powered vehicles in an on-campus shop setting. Local industry training partnerships provide practical experience that enhances student instruction. Graduates may find employment as technicians in diesel and heavy duty apprenticeships, working with on/off highway trucks, construction equipment, hydraulics, material handling equipment, agricultural equipment, marine, and utilities. Customized training and scholarships are available.

### Associate of Technology Degree: 114.5 credits

#### Diesel & Heavy Equipment Mechanic

		<u>Credits/Hours</u>
Completion Range: 14-23 Months		
DSL 091	Occupational Human Relations	1/17
DSL 092	Occupational Communications	3/50
DSL 093	Occupational Math Principles	4/65
DSL 094	Applying Safety Principles	3.5/60
DSL 095	Environmental Protection Practices	2/40
DSL 097	Pre-Apprenticeship Welding	11/180
DSL 101A	Engine, Fuel Systems I	10/165
DSL 101B	Engine, Fuel Systems II	9.5/155
DSL 102A	Power Trains I	10/165
DSL 102B	Power Trains II	9.5/155
DSL 103A	Hydraulic Systems	10.5/173
DSL 103B	Hydraulic Systems II	1.5/24
DSL 103C	Hydraulic Systems III	2.5/42
DSL 103D	Material Handling Systems	5/81
DSL 123	Electrical System Fundamentals	14.5/240
DSL 124	Air Conditioning, Refrigeration Fundamentals	5/80
DSL 215	Tractor Brake Systems	13.5/220
DSL 218	Marine Cooling Systems	1.5/30
DSL 230A	Intermediate Service I	14/230
DSL 230B	Intermediate Service II	12/195
DSL 240A	Work-Based Learning Experience I	14/230
DSL 240B	Work-Based Learning Experience II	13.5/220
DSL 241A	Heavy Equipment Maintenance I	14/230
DSL 241B	Heavy Equipment Maintenance II	13.5/220

#### General Education Requirements

	<u>Credits</u>
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

### Certificate of Competency: 88 credits

#### Diesel Service Helper

		<u>Credits/Hours</u>
Completion Range: 11-20 Months		
DSL 091	Occupational Human Relations	1/17
DSL 101A	Engine, Fuel Systems I	10/165
DSL 101B	Engine, Fuel Systems II	9.5/155
DSL 102A	Power Trains I	10/165
DSL 102B	Power Trains II	9.5/155
DSL 103A	Hydraulic Systems	10.5/173
DSL 103B	Hydraulic Systems II	1.5/24
DSL 103C	Hydraulic Systems III	2.5/42
DSL 103D	Material Handling Systems	5/81
DSL 123	Electrical System Fundamentals	14.5/240
DSL 124	Air Conditioning, Refrigeration Fundamentals	5/80

#### 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: 22.5 credits

#### Electrical

		<u>Credits/Hours</u>
Completion Range: 11 Weeks		
DSL 091	Occupational Human Relations	1/17
DSL 092	Occupational Communications	3/50
DSL 093	Occupational Math Principles	4/65
DSL 123	Electrical System Fundamentals	14.5/240

### Certificate of Training: 27.5 credits

#### Engines

		<u>Credits/Hours</u>
Completion Range: 13 Weeks		
DSL 091	Occupational Human Relations	1/17
DSL 092	Occupational Communications	3/50
DSL 093	Occupational Math Principles	4/65
DSL 101A	Engine/Fuel Systems I	10/165
DSL 101B	Engine/Fuel Systems II	9.5/155

### Certificate of Training: 22.5 credits

#### Hydraulics & Pneumatics

		<u>Credits/Hours</u>
Completion Range: 11 Weeks		
DSL 091	Occupational Human Relations	1/17
DSL 092	Occupational Communications	3/50
DSL 093	Occupational Math Principles	4/65
DSL 103A	Hydraulic Systems	10.5/173
DSL 103B	Hydraulic Systems II	1.5/24
DSL 103C	Hydraulic Systems III	2.5/42

### Certificate of Training: 34 credits

#### Lube Technician

		<u>Credits/Hours</u>
Completion Range: 16 Weeks		
DSL 091	Occupational Human Relations	1/17
DSL 092	Occupational Communications	3/50
DSL 093	Occupational Math Principles	4/65
DSL 230A	Intermediate Service I	4/230
DSL 230B	Intermediate Service II	12/195

### Certificate of Training: 27.5 credits

#### Power Trains

		<u>Credits/Hours</u>
Completion Range: 13 Weeks		
DSL 091	Occupational Human Relations	1/17
DSL 092	Occupational Communications	3/50
DSL 093	Occupational Math Principles	4/65
DSL 102A	Power Trains I	10/165
DSL 102B	Power Trains II	9.5/155