



# *Mechanical Engineering Technology Program*

## OVERVIEW OF THE PROGRAMS

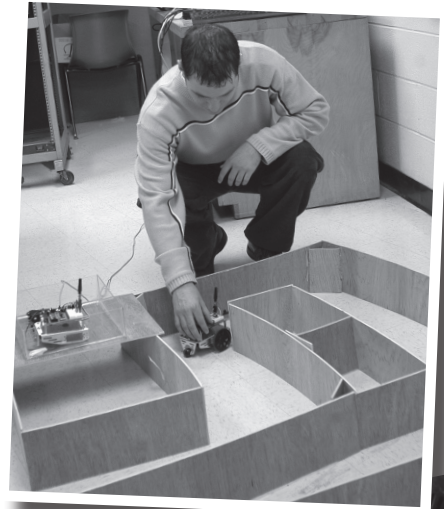
Mechanical engineering is the most broad and diverse of any of the engineering and related disciplines. Our technology students master topics ranging from advanced mathematics to dynamics and the thermal science. The program combines rigorous technology and engineering with hands-on lab experience. The set of courses uses a flexible 2+2 curriculum. Students solve complex mechanical problems while they learn by doing. Classes are small. Students interact, one-to-one with talented, highly trained and internationally recognized faculty. Professors want each student to succeed and devote the time to see that they do.

Student activities focus on honing mechanical skills. All first year students join the student chapter of the American Society of Mechanical Engineers. Later they may join the Society of Automotive Engineers. These societies hold nation-wide student competitions. Fairmont State funds undergraduate research. Active alumni serve as consultants. Students formulate, design, fabricate, tests and compete their racecars, robots and industrial devices at the nation's top engineering campuses. It's hands-on. If steering needs adjustment, they adjust it. If a part needs machined, they machine it. In addition, all seniors perform research and do a design task as a class assignment for a local manufacturer. Students present their research results before engineering society professional conferences.

The program has Accreditation Board for Engineering and Technology accreditation. Graduates are eligible to take the professional engineering licensing exam. Students have access to and help with scholarships and grants. Most students finish their studies with a paid internship.

## EMPLOYMENT OPPORTUNITIES

Nine out of ten of the program's graduates found career starters in North Central West Virginia. In the last few years, all May graduates had their job offers before November. Most start at \$54,000 - \$56,000 per year. Some grads seek advanced degrees while working. Some are beginning to continue at top graduate schools: Michigan, Texas, Penn State, Ohio State, etc.



*fast fact*

***At mid-career, mechanical and related engineers earn \$100,000 per year, nationwide; 88% more than \$72,000.***

FOR MORE INFORMATION VISIT

**[www.fairmontstate.edu/academics/collegeofscitech/default.asp](http://www.fairmontstate.edu/academics/collegeofscitech/default.asp)**

## CONTACT INFORMATION

Mr. Jason Bolyard  
Department of Technology  
Room 418, Engineering Technology  
Phone: (304) 367-4849  
E-mail: James.Bolyard@fairmontstate.edu

---

## NOTES

# MODEL SCHEDULE

## Mechanical Engineering Technology (B.S.)

### FRESHMAN FIRST SEMESTER

ENGL 1104	WRITTEN ENGLISH I	3
MATH 1101	APPLIED TECHNICAL MATH I	3
DRFT 1100	ENGINEERING GRAPHICS	3
DRFT 2200	FUNDAMENTALS OF CAD	3
ECON 2200	INTRODUCTION TO ECONOMICS	3
MANF 1100	MATERIALS & PROCESSES	3
		16

### FRESHMAN SECOND SEMESTER

COMM 2200 OR 2201 OR 2202		3
ELEC 1100	CIRCUIT ANALYSIS	3
ENGL 1108	WRITTEN ENGLISH II	3
MATH 1102	APPLIED TECHNICAL MATH II	3
MECH 1100	STATICS	3
		15

### SOPHOMORE FIRST SEMESTER

PHYS 1101	INTRODUCTION TO PHYSICS I	4
COMP 1101	APPLIED TECHNICAL PROGRAMMING	3
ELEC 2250	AC/DC MACHINERY	3
MECH 2200	STRENGTH OF MATERIALS	4
TECH 2290	ENGINEERING ANALYSIS I	4
		18

### SOPHOMORE SECOND SEMESTER

PHYS 1102	INTRODUCTION TO PHYSICS II	4
MECH 2210	THERMODYNAMICS I	3
MECH 2220	FLUID MECHANICS	3
MECH 2240	MACHINE DESIGN I	3
DRFT 2235	TECHNICAL DRAFTING	3
		16

### JUNIOR FIRST SEMESTER

CHEM 1101	GENERAL CHEMISTRY I	4
ENGL 1109	TECHNICAL REPORT WRITING	3
MECH 3300	THERMODYNAMICS II	3
TECH 3300	ENGINEERING ANALYSIS II	4
	GENERAL STUDIES - ARTISTIC/CREATIVE/INTERDISCIPLINARY ELECTIVE	3
		17

### JUNIOR SECOND SEMESTER

CHEM 1102	GENERAL CHEMISTRY II	4
	GENERAL STUDIES - CULTURE/CIVILIZATION EXPLORATION ELECTIVE	3
MECH 3340	HEATING, AIR CONDITIONING AND VENTILATION	3
	TECH ELECTIVE	3
	GENERAL STUDIES - ARTISTIC/CREATIVE/INTERDISCIPLINARY ELECTIVE	3
		16

### SENIOR FIRST SEMESTER

	GENERAL STUDIES - CULTURE/CIVILIZATION EXPLORATION ELECTIVE	3
MECH 3320	DYNAMICS	3
MECH 3330	HEAT TRANSFER I	3
	TECH ELECTIVE	3
	GENERAL STUDIES - CULTURE/CIVILIZATION EXPLORATION ELECTIVE	3
		15

### SENIOR SECOND SEMESTER

MECH 4400	MECHANICAL MEASUREMENTS	3
MECH 4410	THERMODYNAMICS III	3
MECH 4430	HEAT TRANSFER II	3
	TECH ELECTIVE	3
	GENERAL STUDIES - SOCIETY/HUMAN INTERACTION ELECTIVE	3
		15