

AAS Mechatronics Systems Engineering Technology

The following provides information regarding courses required to complete this major at Virginia Western for planning purposes only.

Completed	Course	Course Title	Credit	Requisite	Term Offered
	SDV 101	Orientation to Engineering and Mathematics	2		F, Sp
	MTE 1	Operations with Positive Fractions	**	Math Placement	F, Sp, Su
	MTE 2	Operations with Positive Decimals and Percents	**	MTE 1	F, Sp, Su
	MTE 3	Algebra Basics	**	MTE 2	F, Sp, Su
	MTE 4	First Degree Equations and Inequalities in One Variable	**	MTE 3	F, Sp, Su
	MTE 5	Linear Equations, Inequalities and Systems of Linear Equations in Two Variables	**	MTE 4	F, Sp, Su
	MTE 6	Exponents, Factoring and Polynomial Equations	**	MTE 5	F, Sp, Su
	ENG 111	College Composition I	3	English Placement	F, Sp, Su
	* MTH 131	Technical Mathematics	3	MTE 1-6	F, Sp
		OR			
	MTH 167	Pre-Calculus with Trigonometry	5	MTE 1-9	F, Sp, Su
	EGR 216	Computer Methods in Engineering and Technology	3		F, Sp, Su
	ETR 113	DC and AC Fundamentals I	4	MTE 1-3	F, Sp
	CAD 111	Technical Drafting I	3	MTE 1-3	F, Sp, Su
	* MTH 155	Statistical Reasoning	3	Pre: MTE 1-5 or Co: MCR 5	F, Sp, Su
		OR			
	MTH 263	Calculus I	4	MTH 167 - C	F, Sp, Su
	EGR 105	Introduction to Problem Solving in Technology	1	Co: Any MTH Course	F, Sp
	ETR 237	Industrial Electronics I	4	ETR 113	F, Sp
	MEC 113	Materials and Processes of Industry	3		Sp
	MEC 131	Mechanics I - Statics for Engineering Technology	3	MTH 131	Sp, Su
	MEC 162	Applied Hydraulics and Pneumatics	3		F, Sp
	CAD 241	Parametric Solid Modeling I	3		F, Sp
	IND 250	Introduction to Basic Computer Integrated Manufacturing	3		F
	MEC 132	Mechanics II - Strength of Materials for Engineering Technology	3	MEC 131	F, Sp
	PHY 201	General College Physics I	4	MTH 131; English Placement	F, Sp, Su
	SOC SCI	ECO 201, GEO 210, HIS 111, HIS 112, PLS 211, PSY 200 or SOC 200	3		F, Sp, Su
	Hum/FA	ART 101, ART 102, CST 130, MUS 121, MUS 122, PHI 101 or REL 230	3		
	IND 230	Applied Quality Control	3	EGR 216	Sp
	IND 251	Automated Manufacturing Systems I	4		Sp
	SAF 127	Industrial Safety	2		F, Sp, Su
	ETR 238	Industrial Electronics II	3	ETR 237	Sp
		OR			
	IND 290	Coordinated Internship in Industrial Engineering	3		F, Sp, Su

*Choice of math course depends on the student's intentions regarding transfer. See your advisor for additional information.

**MTE classes are developmental courses. Students may place out of these classes based on various measures, including high school GPA, standardized test scores, or placement testing.

Total program credits: 66