## **AAS Mechatronics Systems Engineering Technology**

The following provides information regarding courses required to complete this major at Virginia Western for planning purposes only. Please see the Academic Catalog and full disclosure statement at http://catalog.virginiawestern.edu.

Completed	Course	Course Title	Credit	Requisite	Term Offered
	SDV 100	College Success Skills	1		F, Sp, Su
	SDV 101	Orientation to Engineering and Mathematics	1		F, Sp, Su
	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 115	Technical Mathematics I	_	MTE 1-6	F, Sp
	NATIL 4.67	OR	3	NATE 4 O	E C C
	MTH 167	Pre-Calculus with Trigonometry	-	MTE 1-9	F, Sp, Su
	EGR 216	Computer Methods in Engineering and Technology	3	Co: MTH 115	F, Sp
	ETR 113	DC and AC Fundamentals I	4	MTE 1-3	F, Sp
	CAD 111	Technical Drafting I	3	MTE 1-3	F, Sp
	MTH 116	Technical Mathematics II  OR	3	MTE 1-6	Sp
	MTH 263	Calculus I		MTH 167 - C	F, Sp, Su
	EGR 105	Introduction to Problem Solving in Technology	1		Sp
	CAD 241	Parametric Solid Modeling I	3	CAD 111 or DRF 201	F, Sp
	MEC 113	Materials and Processes of Industry	3		Sp
	MEC 131	Mechanics I - Statics for Engineering Technology	3	Pre: MTH 115 Co: MTH 116	Sp, Su
	MEC 162	Applied Hydraulics and Pneumatics	3		F, Sp
	ETR 237	Industrial Electronics I	4	ETR 113	F
	IND 250	Introduction to Basic Computer Integrated Manufacturing	3		F
	MEC 132	Mechanics II - Strength of Materials for Engineering Technology	3	MEC 131	F, Su
	PHY 201	General College Physics I	4	MTH 115 or MTH 161 or MTH 167 and English Placement	F, Sp, Su
	HIS 111	History of World Civilization I			F, Sp, Su
	HIS 121	OR United States History I OR	3		F, Sp, Su
	ECO 201	Principles of Macroeconomics			F, Sp
	ART 101	History and Appreciation of Art I  OR			F, Sp
	MUS 122	Music Appreciation II	3		Sp
	PHI 220	OR Ethics			F, Sp, Su
	IND 230	Applied Quality Control	3		Sp
	IND 251	Automated Manufacturing Systems I	4		Sp
	SAF 127	Industrial Safety	2		F, Sp, Su
	ETR 238	Industrial Electronics II  OR	3	ETR 237	Sp
	IND 290	Coordinated Internship in Industrial Engineering	3		F, Sp, Su

<sup>\*\*</sup>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**