

# AAS Mechatronics Systems Engineering Technology (736)

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 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
*	MTH 111	Basic Technical Mathematics	3	Pre: MTE 1-3 or Co: MCR 1	F, Sp
	MTH 167	Pre-Calculus with Trigonometry	5	MTE 1-9	F, Sp, Su
	MEC 113	Materials and Processes of Industry	3		Sp
	ETR 113	DC and AC Fundamentals I	4	MTE 1-3	F, Sp
	SAF 127	Industrial Safety	2		F, Sp, Su
	CAD 111	Technical Drafting I	3	MTE 1-3	F, Sp, Su
	MEC 162	Applied Hydraulics and Pneumatics	3		F, Sp
	ETR 237	Industrial Electronics I	4	ETR 113	F, Sp
*	MTH 131	Technical Mathematics	3	MTE 1-6	F, Sp
	MTH 263	Calculus I	4	MTH 167 - C	F, Sp, Su
	EGR 216	Computer Methods in Engineering and Technology	3		F, Sp, Su
	CAD 241	Parametric Solid Modeling I	3	CAD 111	F, Sp
	IND 250	Introduction to Basic Computer Integrated Manufacturing	3	ETR 113	F
	ENG 111	College Composition I	3	English Placement	F, Sp, Su
	MEC 131	Mechanics I - Statics for Engineering Technology	3	Pre: MTH 111 Co: MTH 131	Sp, Su
	ETR 238	Industrial Electronics II	3	ETR 237	Sp
	PHY 201	General College Physics I	4	MTH 131; English Placement	F, Sp, Su
	MEC 132	Mechanics II - Strength of Materials for Engineering Technology	3	MEC 131	F, Sp
	IND 230	Applied Quality Control	3	EGR 216	Sp
	IND 251	Automated Manufacturing Systems I	3	IND 250	Sp
	HUM/FA	ART 101, ART 102, CST 130, MUS 121, MUS 122, PHI 101 or REL 230	3		
	ETR 286	Principles and Applications of Robotics	3	ETR 113	Sp
	CAD 298	Seminar and Project in Computer Aided Drafting and Design	3	Pre: CAD 111 Co: CAD 241 CAD 242	Sp
	SOC SCI	ECO 201, GEO 210, HIS 111, HIS 112, PLS 211, PSY 200 or SOC 200	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: 67**