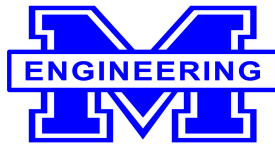


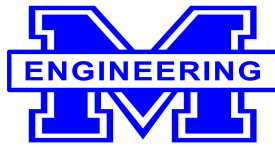
## Mooreville High School Academy of Engineering Program of Study- Option 1

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<p><b>STEM 101 – Introduction to Engineering</b></p> <p><i>Recommended Elective:</i></p> <p>Drafting I</p>	<p><b>Adobe Visual Design</b></p> <p><i>Recommended Elective:</i></p> <p>Drafting I (if not taken in 9th grade)</p> <p>Metals 1/2</p>	<p><b>STEM 101 – Drafting II Honors</b></p> <p><i>Recommended Electives:</i></p> <p>Drafting II Architectural Honors</p> <p>Metals 1/2</p> <p>Mitchell CCP Courses (see list below)</p>	<p><b>STEM 101 - Principles of Engineering Honors</b></p> <p><i>Recommended Electives:</i></p> <p>Honors Drafting III Engineering Honors</p> <p>Honors Drafting III Architectural Honors</p> <p>Metals 1/2</p> <p>Mitchell CCP Courses (see list below)</p>
<p><b>Credentials and Certifications Possible:</b></p> <ul style="list-style-type: none"> <li>• Autodesk Certified User AutoCAD®</li> <li>• Autodesk Certified User Inventor®</li> <li>• Autodesk Certified User Revit®</li> <li>• Autodesk Certified Professional Inventor®</li> <li>• Autodesk Certified Professional Revit®</li> <li>• Autodesk Fusion 360®</li> <li>• Adobe Illustrator®</li> <li>• Adobe Photoshop®</li> <li>• Adobe InDesign®</li> <li>• NAFTrack Certification</li> <li>• Career Readiness Certificate (WorkKeys)</li> <li>• Community College Articulation Credits</li> </ul>		<p><b>Mitchell CCP Engineering Courses Available:</b></p> <ul style="list-style-type: none"> <li>• PHY 251 – General Physics I</li> <li>• PHY 252 – General Physics II</li> <li>• EGR 150 – Intro. to Engineering</li> <li>• DFT 170 – Engineering Graphics</li> <li>• MAT 271 – Calculus I</li> <li>• MAT 272 – Calculus II</li> </ul>	
<p><b>Academy of Engineering Cohorted Courses and Internship:</b></p> <p>Academy of Engineering students will take STEM 101 or a CTE course each year. The courses in bold are required.</p> <p>Students will complete an internship during their senior year or the summer before their senior year. During their junior and senior years, students will have the opportunity to take CCP courses at Mitchell to enhance their engineering experience. The courses listed above are within the Engineering pathway; however, other pathways are available.</p>			



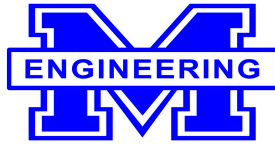
## Mooresville High School Academy of Engineering Program of Study- Option 2

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<p><b>STEM 101 – Introduction to Engineering</b></p> <p><i>Recommended Elective:</i></p> <p>Adobe Visual Design</p>	<p><b>Drafting 1</b></p> <p><i>Recommended Elective:</i></p> <p>Adobe Visual Design (if not taken in 9th grade)</p> <p>Metals 1/2</p>	<p><b>STEM 101 – Drafting II Honors</b></p> <p><i>Recommended Electives:</i></p> <p>Drafting II Engineering Honors</p> <p>Drafting II Architectural Honors</p> <p>Metals 1/2</p> <p>Mitchell CCP Courses (see list below)</p>	<p><b>STEM 101 - Principles of Engineering Honors</b></p> <p><i>Recommended Electives:</i></p> <p>Honors Drafting III Engineering Honors</p> <p>Honors Drafting III Architectural Honors</p> <p>Metals 1/2</p> <p>Mitchell CCP Courses (see list below)</p>
<p><b>Credentials and Certifications Possible:</b></p> <ul style="list-style-type: none"> <li>• Autodesk Certified User AutoCAD®</li> <li>• Autodesk Certified User Inventor®</li> <li>• Autodesk Certified User Revit®</li> <li>• Autodesk Certified Professional Inventor®</li> <li>• Autodesk Certified Professional Revit®</li> <li>• Autodesk Fusion 360®</li> <li>• Adobe Illustrator®</li> <li>• Adobe Photoshop®</li> <li>• Adobe InDesign®</li> <li>• NAFTrack Certification</li> <li>• Career Readiness Certificate (WorkKeys)</li> <li>• Community College Articulation Credits</li> </ul>		<p><b>Mitchell CCP Engineering Courses Available:</b></p> <ul style="list-style-type: none"> <li>• PHY 251 – General Physics I</li> <li>• PHY 252 – General Physics II</li> <li>• EGR 150 – Intro. to Engineering</li> <li>• DFT 170 – Engineering Graphics</li> <li>• MAT 271 – Calculus I</li> <li>• MAT 272 – Calculus II</li> </ul>	
<p><b>Academy of Engineering Cohorted Courses and Internship:</b></p> <p>Academy of Engineering students will take STEM 101 or a CTE course each year. The courses in bold are required.</p> <p>Students will complete an internship during their senior year or the summer before their senior year. During their junior and senior years, students will have the opportunity to take CCP courses at Mitchell to enhance their engineering experience. The courses listed above are within the Engineering pathway; however, other pathways are available.</p>			



## Mooresville High School Academy of Engineering Program of Study- Option 3

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<p><b>STEM 101 – Introduction to Engineering</b> <i>Recommended Elective:</i></p> <p>Drafting I</p>	<p><b>Advanced Manufacturing I Honors</b> <i>Recommended Elective:</i></p> <p>Drafting I (if not taken in 9th grade)</p> <p>Metals 1/2</p>	<p><b>Advanced Manufacturing II Honors</b> <i>Recommended Electives:</i></p> <p>Drafting II Architectural Honors</p> <p>Metals 1/2</p> <p>Mitchell CCP Courses (see list below)</p>	<p><b>STEM 101 – Drafting II Eng Honors</b> <i>Recommended Electives:</i></p> <p>STEM 101 Principles of Engineering Honors</p> <p>Honors Drafting III – Engineering Honors</p> <p>Metals 1/2</p> <p>Honors Drafting III - Architectural Honors</p> <p>Mitchell CCP Courses (see list below)</p>
<p><b>Credentials and Certifications Possible:</b></p> <ul style="list-style-type: none"> <li>• Autodesk Certified User AutoCAD®</li> <li>• Autodesk Certified User Inventor®</li> <li>• Autodesk Certified User Revit®</li> <li>• Autodesk Certified Professional Inventor®</li> <li>• Autodesk Certified Professional Revit®</li> <li>• Adobe Illustrator®</li> <li>• Adobe Photoshop®</li> <li>• Adobe InDesign®</li> <li>• NAFTrack Certification</li> <li>• Career Readiness Certificate (WorkKeys)</li> <li>• Community College Articulation Credits</li> </ul>		<p><b>Mitchell CCP Engineering Courses Available:</b></p> <ul style="list-style-type: none"> <li>• PHY 251 – General Physics I</li> <li>• PHY 252 – General Physics II</li> <li>• EGR 150 – Intro. to Engineering</li> <li>• DFT 170 – Engineering Graphics</li> <li>• MAT 271 – Calculus I</li> <li>• MAT 272 – Calculus II</li> </ul>	
<p><b>Academy of Engineering Cohorted Courses and Internship:</b></p> <p>Academy of Engineering students will take STEM 101 or a CTE course each year. The courses in bold are required.</p> <p>Students will complete an internship during their senior year or the summer before their senior year. During their junior and senior years, students will have the opportunity to take CCP courses at Mitchell to enhance their engineering experience. The courses listed above are within the Engineering pathway; however, other pathways are available.</p>			



## Mooresville High School Academy of Engineering Program of Study- Option 4

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<p><b>STEM 101 – Introduction to Engineering</b></p> <p><i>Recommended Elective:</i></p> <p>Drafting I</p>	<p><b>Advanced Manufacturing I Honors</b></p> <p><i>Recommended Elective:</i></p> <p>Drafting I (if not taken in 9th grade)</p> <p>Metals 1/2</p>	<p><b>Advanced Manufacturing II Honors</b></p> <p><i>Recommended Electives:</i></p> <p>Drafting II Engineering Honors</p> <p>Drafting II Architectural Honors</p> <p>Metals 1/2</p> <p>Mitchell CCP Courses (see list below)</p>	<p><b>STEM 101 - Principles of Engineering - Honors</b></p> <p><i>Recommended Electives:</i></p> <p>Honors Drafting III – Engineering Honors</p> <p>Honors Drafting III - Architectural Honors</p> <p>Metals 1/2</p> <p>Mitchell CCP Courses (see list below)</p>
<p><b>Credentials and Certifications Possible:</b></p> <ul style="list-style-type: none"> <li>• Autodesk Certified User AutoCAD®</li> <li>• Autodesk Certified User Inventor®</li> <li>• Autodesk Certified User Revit®</li> <li>• Autodesk Certified Professional Inventor®</li> <li>• Autodesk Certified Professional Revit®</li> <li>• Adobe Illustrator®</li> <li>• Adobe Photoshop®</li> <li>• Adobe InDesign®</li> <li>• NAFTrack Certification</li> <li>• Career Readiness Certificate (WorkKeys)</li> <li>• Community College Articulation Credits</li> </ul>		<p><b>Mitchell CCP Engineering Courses Available:</b></p> <ul style="list-style-type: none"> <li>• PHY 251 – General Physics I</li> <li>• PHY 252 – General Physics II</li> <li>• EGR 150 – Intro. to Engineering</li> <li>• DFT 170 – Engineering Graphics</li> <li>• MAT 271 – Calculus I</li> <li>• MAT 272 – Calculus II</li> </ul>	
<p><b>Academy of Engineering Cohorted Courses and Internship:</b></p> <p>Academy of Engineering students will take STEM 101 or a CTE course each year. The courses in bold are required.</p> <p>Students will complete an internship during their senior year or the summer before their senior year. During their junior and senior years, students will have the opportunity to take CCP courses at Mitchell to enhance their engineering experience. The courses listed above are within the Engineering pathway; however, other pathways are available.</p>			