

Physics Major			Specific or Special Academic Department Information
First Semester (Orientation)	Second Semester (Oct/Nov)	Third Semester (Mar/Apr)	
<p>FYE Block (15 Credits)</p> <ul style="list-style-type: none"> • EN111 (4) • MA161 (4) • CH111 (5) • UN100 (2) <p>15 Credits</p> <ul style="list-style-type: none"> • Important to take MA161, if possible, in first semester – if NOT eligible, take MA115 • If not eligible for MA115, take appropriate MA course and delay PH220 for one year 	<ul style="list-style-type: none"> • PH220 (5) • MA163 (4) • CH112 (5) • EN211 (4) or LS Elective (4) <p>18 Credits</p> <ul style="list-style-type: none"> • Students ineligible for MA163 must take MA161 (PH220 instructor must provide permission to override pre-requisite) • If taking MA161, should try to take MA163 in summer • If not eligible to take CH112, take CH111 and try to take CH112 in summer • PH220 is only offered in winter 	<ul style="list-style-type: none"> • PH221 (5) • MA211 (3) • MA265 (4) • EN211 (4) or CS120 (4) <p>16 Credits</p> <ul style="list-style-type: none"> • Students ineligible for MA265 must take MA163 (PH221 instructor must provide permission to override pre-requisite) • PH221 is only offered in the fall 	<ul style="list-style-type: none"> • Mathematics minor recommended (minor almost completed by taking MA as pre-requisites for PH courses) • Must take MA211 and MA265 to go into MA361; MA361 is a pre-requisite for many of the upper-level PH courses • PH majors should talk with PH220 professor to confirm course plans

Pre-Engineering Program			Specific or Special Academic Department Information
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<p style="text-align: center;">FYE Block (15 Credits)</p> <ul style="list-style-type: none"> • EN111 (4) • MA161 (4) • CH111 (5) • UN100 (2) <p style="text-align: center;">15 Credits</p> <ul style="list-style-type: none"> • Important to take MA161, if possible, in first semester – if NOT eligible, take MA115 • If not eligible for MA115, take appropriate MA course and delay PH220 for one year 	<ul style="list-style-type: none"> • PH220 (5) • MA163 (4) • CH112 (5) • EN211 (4) or LS Elective (4) <p style="text-align: center;">18 Credits</p> <ul style="list-style-type: none"> • Students ineligible for MA163 must take MA161 (PH220 instructor must provide permission to override pre-requisite) • If taking MA161, should try to take MA163 in summer • If not eligible to take CH112, take CH111 and try to take CH112 in summer • PH220 is only offered in winter 	<ul style="list-style-type: none"> • PH221 (5) • MA211 (3) • MA265 (4) • EN211 (4) or CS120 (4) <p style="text-align: center;">16 Credits</p> <ul style="list-style-type: none"> • Students ineligible for MA265 must take MA163 (PH221 instructor must provide permission to override pre-requisite) • PH221 is only offered in the fall 	<ul style="list-style-type: none"> • Program is designed for students to spend two years at NMU before transferring to an engineering school (no degree awarded at NMU) • Engineering Technology is NOT Engineering • Students should research engineering schools to meet <i>their</i> pre-requisites • Students need to get to know physics faculty while at NMU – they will need letters from faculty to enter engineering schools