

|        |                            | Pre-Req.   | Term                | Math &<br>Basic Sci. | Engin.<br>Topics | Gen.<br>Educ. | Other | Total |     |
|--------|----------------------------|--|---------------------|----------------------|------------------|---------------|-------|-------|-----|
| T<br>E | Fresh. I                   | MATH111-Calculus I   | I, II, S            | 4                    | 0                | 0             | 0     | 4     |     |
|        |                            | CHGN121-Chemistry I  | I, II               | 4                    | 0                | 0             | 0     | 4     |     |
|        |                            | LAIS100-Nature & Human Val.  | I,II                | 0                    | 0                | 4             | 0     | 4     |     |
|        |                            | GEGN101-Earth & Env. OR<br>CBEN110-Fund. Of Biology OR<br>CSCI 101-Intro. Comp. Sci*** | I, II, S            | 4                    | 0                | 0             | 0     | 4     |     |
|        |                            | CSM101-Success Seminar   |                     | 0                    | 0                | 0             | 0.5   | 0.5   |     |
|        |                            | PAGN101-Physical Education   | I                   | 0                    | 0                | 0             | 0.5   | 0.5   |     |
|        |                            | Total  |                     | 12                   | 0                | 4             | 1     | 17    |     |
| R      | Fresh. II                  | MATH112-Calculus II  | MA111               | I, II, S             | 4                | 0             | 0     | 4     |     |
|        |                            | CHGN122-Chemistry II   | CH121               | I, II, S             | 4                | 0             | 0     | 4     |     |
|        |                            | PHGN100-Physics I Mechan.  | co-MA112            | I, II, S             | 4.5              | 0             | 0     | 0     | 4.5 |
|        |                            | EPIC151-Design I   |                     | I, II                | 0                | 3 √           | 0     | 0     | 3   |
|        |                            | PAGN102-Physical Education   |                     | II                   | 0                | 0             | 0     | 0.5   | 0.5 |
|        |                            | Total  |                     | 12.5                 | 3                | 0             | 0.5   | 16    |     |
| M      | Soph. I                    | MATH213- Calculus III  | MA112               | I, II, S             | 4                | 0             | 0     | 4     |     |
|        |                            | PHGN200-Physics II E&M   | PH100, co-MA213     | I, II, S             | 4.5              | 0             | 0     | 0     | 4.5 |
|        |                            | EPIC269-EPICS II-Eng. Phys■  | EP151               | I, II                | 0                | 3 √           | 0     | 0     | 3   |
|        |                            | LAIS200-Human Systems  | LIHU100             | I, II                | 0                | 0             | 3     | 0     | 3   |
|        |                            | CEEN241-Statics  | PH100               | I,II,S               | 0                | 3             | 0     | 0     | 3   |
|        |                            | PAGN20x-Physical Education   |                     | I, II                | 0                | 0             | 0     | 0.5   | 0.5 |
|        |                            | Total  |                     | 8.5                  | 6                | 3             | 0.5   | 18    |     |
|        | Soph. II                   | MATH225/235-Differential Eq.   | MA213               | I,II,S/II            | 3                | 0             | 0     | 0     | 3   |
|        |                            | MATH332/342-Linear Algebra   | MA213 or 223 or 224 | I, II/II             | 3                | 0             | 0     |       | 3   |
|        |                            | PHGN215-Analog Circuits  | PH200               | II                   | 0                | 4             | 0     | 0     | 4   |
|        |                            | PHGN300/310**-Mod. Physics I   | PH200, co-MA225/235 | I,II                 | 3                | 0             | 0     | 0     | 3   |
|        |                            | CHGN209/CBEN210*-Intro Thermo.   | CH122,PH100,MA112   | I, II                | 0                | 3             | 0     | 0     | 3   |
|        |                            | PAGN20x-Physical Education   |                     | I, II                | 0                | 0             | 0     | 0.5   | 0.5 |
|        |                            | Total  |                     | 9                    | 7                | 0             | 0.5   | 16.5  |     |
| Summer | PHGN384-Summer Field Sess. | PH300/310,PH215  | S                   | 0                    | 6 √              | 0             | 0     | 6     |     |

\*The Physics Department recommends that you take CBEN210

\*\*The Physics Department recommends that you take PHGN310

\*\*\*CSCI 101 is only 3 credits--Students taking this course must take at least one additional credit to meet total credit hour requirements.

■ Any flavor of EPICS II is allowed for Physics. EPIC 269 Fa

√ Significant Design

|                            |                               | Pre-Req.                      | Term                        | Math &<br>Basic Sci. | Engin.<br>Topics | Gen.<br>Educ. | Other      | Total        |           |
|----------------------------|-------------------------------|-------------------------------|-----------------------------|----------------------|------------------|---------------|------------|--------------|-----------|
| <b>T<br/>E<br/>R<br/>M</b> | Jun. I                        | PHGN311-Intro to Math Phys.   | MA225/235,332/342,PH300/310 | I                    | 3                | 0             | 0          | 0            | 3         |
|                            |                               | PHGN315-Advanced Lab I        | PH300/310                   | I                    | 0                | 2             | 0          | 0            | 2         |
|                            |                               | PHGN317-Digital Circuits      | PH215 or EENG281+EG250      | I                    | 0                | 3             | 0          | 0            | 3         |
|                            |                               | PHGN350-Interm. Mechanics     | PH200, co-PH311             | I                    | 0                | 4             | 0          | 0            | 4         |
|                            |                               | HSS Elective I                |                             |                      | 0                | 0             | 3          | 0            | 3         |
|                            |                               | <b>Total</b>                  |                             |                      | <b>3</b>         | <b>9</b>      | <b>3</b>   | <b>0</b>     | <b>15</b> |
|                            | Jun. II                       | PHGN320-Modern Physics II     | PH300/310, PH311            | II                   | 4                | 0             | 0          | 0            | 4         |
|                            |                               | PHGN326-Advanced Lab II       | PH315                       | II                   | 0                | 2             | 0          | 0            | 2         |
|                            |                               | PHGN341-Thermal Physics       | CHGN209/CBEN210*, PH311     | II                   | 0                | 3             | 0          | 0            | 3         |
|                            |                               | PHGN361-Intermediate E&M      | PH200, PH311                | II                   | 0                | 3             | 0          | 0            | 3         |
|                            |                               | CEEN311-Mech of Materials     | CEEN241                     | I,II                 | 0                | 3             | 0          | 0            | 3         |
|                            | <b>Total</b>                  |                               |                             | <b>4</b>             | <b>11</b>        | <b>0</b>      | <b>0</b>   | <b>15</b>    |           |
|                            | Sen. I                        | PHGN471-Sr. Design Principles | PH384, PH326, co PH481      | I                    | 0                | 0.5           | 0          | 0            | 0.5       |
|                            |                               | PHGN481-Sr. Design Practice■  | PH384, PH326, co-PH471      | I                    | 0                | 2.5           | 0          | 0            | 2.5       |
|                            |                               | PHGN462-EM Waves/Optic.PH     | PH361                       | I                    | 0                | 3             | 0          | 0            | 3         |
|                            |                               | HSS Elective II               |                             |                      | 0                | 0             | 3          | 0            | 3         |
|                            |                               | MEGN351-Fluid Mechanics       | CEEN241                     | I,II                 | 0                | 3             | 0          | 0            | 3         |
|                            |                               | Track 1 or 2: Course 1        |                             |                      | 0                | 3             | 0          | 0            | 3         |
|                            | <b>Total</b>                  |                               |                             | <b>0</b>             | <b>12</b>        | <b>0</b>      | <b>3</b>   | <b>0</b>     | <b>15</b> |
| Sen. II                    | PHGN472-Sr. Design Principles | PH471, PH481, co PH482        | II                          | 0                    | 0.5              | 0             | 0          | 0.5          |           |
|                            | PHGN482-Sr. Design Practice■  | PH471, PH481, co PH472        | II                          | 0                    | 2.5              | 0             | 0          | 2.5          |           |
|                            | MEGN471-Heat Transfer         | MA225235,ME351,ME361 or PH341 | I,II                        | 0                    | 3                | 0             | 0          | 3            |           |
|                            | HSS Elective III              |                               |                             | 0                    | 0                | 3             | 0          | 3            |           |
|                            | Track 1 or 2: Course 2♦       |                               |                             | 0                    | 3                | 0             | 0          | 3            |           |
|                            | EBGN201-Princ of Economics    |                               | I,II,S                      | 0                    | 0                | 3             | 0          | 3            |           |
|                            | <b>Total</b>                  |                               |                             | <b>0</b>             | <b>9</b>         | <b>6</b>      | <b>0</b>   | <b>15</b>    |           |
| <b>TOTAL</b>               |                               |                               |                             | <b>49</b>            | <b>63</b>        | <b>19</b>     | <b>2.5</b> | <b>133.5</b> |           |

**Track 1 Sequence**

|                             |                  |      |   |   |   |   |   |
|-----------------------------|------------------|------|---|---|---|---|---|
| EENG388-Info System Science | PH215, MA225/235 | I    | 0 | 3 | 0 | 0 | 3 |
| EENG307-Feedback Controls   | PH215, MA225/235 | I,II | 0 | 3 | 0 | 0 | 3 |

**Track 2 Sequence**

|                              |                             |      |   |   |   |   |   |
|------------------------------|-----------------------------|------|---|---|---|---|---|
| MEGN424-Computer-Aided Engr. | CEEN311                     | I,II | 0 | 3 | 0 | 0 | 3 |
| MEGN481-Machine Design       | MEGN315 or PHGN350, MEGN424 | I    | 0 | 4 | 0 | 0 | 4 |

\*The Physics Department recommends that you take CBEN210

■Honors courses PHGN491/492 may be substituted with instructor's consent.

♦Add 1 hour for Track 2

√ Significant Design