

DOCTOR OF PHILOSOPHY IN MECHANICAL ENGINEERING

Curriculum Structure

The PhD Program (Total 60 Cr Hrs)

| Curriculum Components | Total Courses | Total Cr Hrs |
|---------------------------|---------------|--------------|
| Core Courses | 1 | 3 |
| Elective Courses in Major | 3 | 9 |
| Thesis | 1 | 48 |
| Total | 5 | 60 |

Core courses

| Core courses | |
|--------------|------------------------------|
| Course ID | Course Title |
| DENG 702 | Applied Research Methodology |

Concentration Courses

| Elective courses | |
|------------------|----------------------------|
| Course ID | Course Title |
| MECH 720 | Finite Element Analysis |
| MECH 701 | Advanced Thermodynamics |
| MECH 702 | Solar Energy Utilization |
| MECH 741 | Advanced Special Topics I |
| MECH 742 | Advanced Special Topics II |

Study Plan

| First Semester (6 Cr Hrs) | | | |
|---------------------------|----------|------------------------------|----------|
| Term | Course # | Course Title | Cr Hrs |
| Fall | DENG 702 | Applied Research Methodology | 3 |
| | MECH XXX | Elective Course I | 3 |
| Total | | | 6 |

| Second Semester (6 Cr Hrs) | | | |
|----------------------------|----------|---------------------|----------|
| Term | Course # | Course Title | Cr Hrs |
| Spring | MECH XXX | Elective Course II | 3 |
| | MECH XXX | Elective Course III | 3 |
| Total | | | 6 |

| Third Semester (12 Cr Hrs) | | | |
|----------------------------|----------|----------------|-----------|
| Term | Course # | Course Title | Cr Hrs |
| Fall | MECH 899 | PhD Thesis | 12 |
| | | Candidacy Exam | |
| Total | | | 12 |

| Fourth Semester (12 Cr Hrs) | | | |
|-----------------------------|----------|--------------|-----------|
| Term | Course # | Course Title | Cr Hrs |
| Spring | MECH 899 | PhD Thesis | 12 |
| Total | | | 12 |

| Fifth Semester (12 Cr Hrs) | | | |
|----------------------------|----------|--------------|-----------|
| Term | Course # | Course Title | Cr Hrs |
| Fall | MECH 899 | PhD Thesis | 12 |
| Total | | | 12 |

| Sixth Semester (12 Cr Hrs) | | | |
|----------------------------|----------|--------------|-----------|
| Term | Course # | Course Title | Cr Hrs |
| Spring | MECH 899 | PhD Thesis | 12 |
| | | Oral Defense | |
| Total | | | 12 |

