

# TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

Major Offered At:

**CORVALLIS**

**Umpqua  
Community College**

## Nuclear Engineering

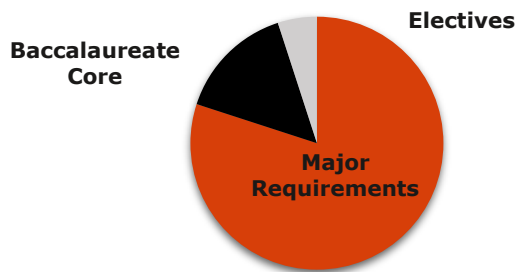
School of Nuclear Science and Engineering (NSE) today boasts a global influence and is one of the top programs in the United States. We are known for our progressive research, large-scale test facilities, and industry and governmental partnerships.

Nuclear engineers apply scientific principles to the research, design and operation of a wide variety of nuclear technology applications including power generation, medicine and radioactive waste management.

Nuclear Engineering graduates are highly employable and have found work in a variety of employment sectors, including:

- Nuclear Power Plants
- Naval Shipyards
- Government agencies (federal, state, local)
- Consulting Firms
- National Labs
- Manufacturing

## Your Bachelor's Degree (BS) in the College of Engineering



- A minimum of 180 credits are required for graduation; 60 must be upper division (300 and 400-level courses).
- A maximum of 135 credits earned at a community college may be applied toward a bachelor's degree at OSU.
- Some courses can count towards your major and the Baccalaureate Core. Advisors can assist in selection.
- More info at [ne.oregonstate.edu/about-nse](http://ne.oregonstate.edu/about-nse)

## Courses Required for Nuclear Engineering Major

This list is comprehensive. Speak with OSU advisor for more information

| Nuclear Engineering Core Requirements | Umpqua CC Equivalent Course | OSU Course | Notes |
|---------------------------------------|-----------------------------|------------|-------|
| Intro Nuc. Engr & Rad. Hlth. Phys I   | N/A                         | NSE 100    |       |
| Intro NE & PHP II                     | N/A                         | NSE 102    |       |
| Intro NE & RHP III                    | N/A                         | NSE 103    |       |
| Mathematical Methods for NSE          | N/A                         | NSE 233    |       |
| Nuclear & Radiation Physics I         | N/A                         | NSE 234    |       |
| Nuclear & Radiation Physics II        | N/A                         | NSE 235    |       |
| Nuc. Rad. Detection & Instrument.     | N/A                         | NSE 236    |       |
| Differential Calculus                 | MTH 251                     | MTH 251    |       |
| Integral Calculus                     | MTH 252                     | MTH 252    |       |
| Vector Calculus                       | MTH 254                     | MTH 254    |       |
| Applied Differential Equations        | MTH 256                     | MTH 256    |       |
| Intro to Matrix Algebra               | MTH 261                     | MTH 264    |       |
| Intro to Series                       | N/A                         | MTH 265    |       |
| Chemistry for Engineering Majors      | N/A                         | CH 201     |       |
| Chemistry for Engineering Majors      | N/A                         | CH 202     |       |
| General Physics (Calculus)            | PH 211                      | PH 211     |       |
| General Physics (Calculus)            | PH 212                      | PH 212     |       |
| General Physics (Calculus)            | PH 213                      | PH 213     |       |
| Electrical Fundamentals I             | ENGR 201                    | ENGR 201   |       |
| Statics                               | ENGR 211                    | ENGR 211   |       |
| Dynamics                              | ENGR 212                    | ENGR 212   |       |
| Strength of Materials                 | ENGR 213                    | ENGR 213   |       |
| Solid Modeling                        | ENGR 245                    | ENGR 248   |       |

## Courses Required for Nuclear Engineering Major, cont.

| Nuclear Engineering Core Requirements | Umpqua CC Equivalent Course | OSU Course  | Notes |
|---------------------------------------|-----------------------------|-------------|-------|
| Technical Writing                     | WR 227                      | WR 327 (LD) |       |
| Public Speaking                       | COMM 111                    | COMM 111    |       |
| Argument & Critical Discourse         | SP 111 or 112               | COMM 114    |       |
| Ethics                                | N/A                         | PHL 205     |       |

## Important Notes & Resources

### Important Notes for the College of Engineering and Nuclear Engineering Major:

- Grade requirements: Grade of C or better in all major coursework. See <https://catalog.oregonstate.edu/college-departments/engineering/> for more information.
- See a sample degree plan by searching "Nuclear Engineering" at [admissions.oregonstate.edu/find-your-major](https://admissions.oregonstate.edu/find-your-major)
- Other similar majors to explore: Mechanical Engineering
- Nuclear Engineering students: the best time to transfer is **Fall** term one year after starting at community college, particularly due to MECOP. Talk with an OSU advisor about your specific timeline.
- It is important to speak with an advisor early on, and often, to ensure correct course selection and sequencing.

### Resources and OSU Information:

- Students do not have to complete a transfer degree in order to transfer to OSU.
  - If you've completed the Oregon AAOT, all requirements of the Baccalaureate Core are complete except for Synthesis Courses and Writing Intensive Courses.
- Preparing to apply to OSU? See admissions info: [transfer.oregonstate.edu](https://transfer.oregonstate.edu)
- Want to take classes at both OSU and an Oregon community college? Check out the Degree Partnership Program: [partnerships.oregonstate.edu/students](https://partnerships.oregonstate.edu/students)
- Schedule your OSU campus tour and meet with an advisor at [visitosu.oregonstate.edu/visit-campus](https://visitosu.oregonstate.edu/visit-campus)

## General Education Courses (called the Baccalaureate Core)

- Complete one course in each Perspective category with no more than two in the same department.
- Full listing of Umpqua courses that fulfill Bacc Core requirements: [admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-umpqua-community-college](https://admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-umpqua-community-college)

|                            |                                                                                                                                                                                              |                                                                                                                                                                                                                                                                |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SKILLS COURSES</b>      | Math<br>Writing I<br>Writing II<br>Speech (Writing III)<br>Fitness (Only HHS 231/241)                                                                                                        | Completed as part of the major<br>WR 121. Required to transfer.<br>Completed as part of the major<br>Completed as part of the major<br>HPE 295                                                                                                                 |
| <b>PERSPECTIVE COURSES</b> | Biological Science<br>Physical Science<br>Additional Biological or Physical Science<br>Cultural Diversity<br>Literature and the Arts<br>Social Processes and Institutions<br>Western Culture | Completed as part of major<br>Completed as part of major<br>Completed as part of major<br>Choose one course from BaccCore link above<br>Choose one course from BaccCore link above<br>Choose one course from BaccCore link above<br>Completed as part of major |
| <b>DPD COURSE</b>          | Difference, Power, & Discrimination                                                                                                                                                          | Choose one course from BaccCore link above                                                                                                                                                                                                                     |
| <b>SYNTHESIS COURSES</b>   | Contemporary Global Issues<br>Science, Technology, & Society                                                                                                                                 | Upper division course, take through OSU<br>Upper division course, take through OSU                                                                                                                                                                             |

## Advising Contacts

Academic advisors at your community college and OSU are available to answer your questions and assist you in creating a transfer plan. **See your community college advisor first and use this Transfer Guide to help you plan.** It is important to speak with your OSU academic advisor early on, and often, to ensure correct course selection and sequencing. See [visitosu.oregonstate.edu/visit-campus](https://visitosu.oregonstate.edu/visit-campus) to schedule your personalized visit.

|                                               |                                                                                                                 |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>Umpqua Community College</b>               | <a href="https://umpqua.edu/areas-of-study/transfer-education">umpqua.edu/areas-of-study/transfer-education</a> |
| <b>OSU Nuclear Engineering</b>                | Joan Stueve: <a href="mailto:joan.stueve@oregonstate.edu">joan.stueve@oregonstate.edu</a>                       |
| <b>OSU College of Engineering Main Office</b> | <a href="mailto:askengineering@oregonstate.edu">askengineering@oregonstate.edu</a>                              |