

Transportation Engineering Graduate Programs

Department of Civil & Environmental Engineering
Maseeh College of Engineering & Computer Science



Portland, Oregon is famous for its multimodal transportation system. Why not come to Portland State University and study Transportation Engineering? Portland is a hub for advanced transportation research conducted at Portland State University in partnership with renowned transportation agencies and firms. We have vibrant **Master's** and **Ph.D.** programs with **full funding (tuition plus a stipend)** available for top students, energetic and committed faculty, we are part of a new National University Transportation Center, have a beautiful new and very active Intelligent Transportation Systems Laboratory and a wonderful downtown Portland location!



Master's Programs

The Master of Science (M.S.) and Master of Engineering (M.Eng.) in Civil and Environmental Engineering with a transportation specialization provide students with the technical and professional knowledge necessary to seek creative solutions to complex problems in the transportation field. Flexibility is achieved by designing programs of study to meet individual needs. Both degrees can be completed in 1½ to 2 years.

M.S. Program

http://www.ce.pdx.edu/dp_master.shtml

The M.S. includes a thesis option (45 quarter credits, including a 6-9 credit thesis, thesis proposal, and defense) or a project option (45 quarter credits, including a 4 credit research project, research report and technical presentation). Students work closely with their advisor to develop a comprehensive and cohesive program of study.

M.Eng. Program

http://www.ce.pdx.edu/dp_meng.shtml

The M.Eng. is a professional degree (48 quarter credits) for those who want the option of a coursework-only program.

FEATURED ALUM: Monica T. Leal, M.S., 2002

Monica completed her M.S. Project on *Empirical Analysis of Traffic Flow Features of a Freeway Bottleneck Surrounding a Lane Drop*, from which a paper was published in the *Journal of Transportation Engineering*. Monica received the Women's Transportation Seminar Graduate Scholarship in 2001 and now works for DKS Associates in Portland.

Doctoral Program

http://www.ce.pdx.edu/dp_phd.shtml

The PhD in Civil and Environmental Engineering requires advanced study and original research in transportation engineering, with at least two years of full-time graduate work beyond the MSCE, a minimum of 24 quarter credits of coursework (transportation and supporting electives), a comprehensive examination, and a dissertation representing an original contribution to knowledge. The Ph.D. can usually be completed in about three years after the master's degree.

A student applying to the Ph.D. program will normally be required to have completed an M.S. in Civil and Environmental Engineering or a closely related field. Applicants need to develop a relationship with a faculty member who agrees to be the official Ph.D. advisor. Faculty are engaged in research related to: intelligent transportation systems, urban transportation, traffic flow theory, data fusion and macroscopic modeling, multi-modal traveler information, traffic management of freeways, traffic operations using real-time traffic information, access management and traffic safety, and land use and access relationships.

FEATURED ALUM: Roger Lindgren, Ph.D., 2005

Roger is an Associate Professor of Civil Engineering at the Oregon Institute of Technology in Klamath Falls. His dissertation, *Analysis of Flow Features in Queued Traffic on a German Freeway*, aimed at understanding traffic features in queued and congested flow. Roger received the Oregon Tech 2003 Faculty Achievement Award, and presented results of his research at the TRB Annual Meeting.



Research Opportunities

The Intelligent Transportation Systems Laboratory website (<http://www.its.pdx.edu>) contains details about current/past research projects, students and activities. We moved into new state-of-the-art laboratories and office space in January 2006. PSU is part of the Oregon Transportation Research and Education Consortium (<http://www.otrec.us>) which offers additional research opportunities.

Transportation Courses

- CE 454 Urban Transportation Systems (4)
- CE 550 Transportation Safety Analysis (4)
- CE 551 Traffic Control & Analysis (4)
- CE 552 Highway Design for Capacity (4)
- CE 553 Freight Transportation and Logistics (4)
- CE 555 Intelligent Transportation Systems (4)
- CE 556 Traffic Engineering (4)
- CE 557 Pavement Design (4)
- CE 558 Public Transportation (4)
- CE 559 Transportation Operations (4)
- CE 560 Access Management (4)
- CE 510 Transportation Data Analysis (4)
- CE 510 Survey and Transportation Data Analysis (4)
- CE 510 Optimization and Network Modeling (4)
- CE 510 Distribution Logistics (4)
- CE 510 International Transport and Logistics (4)
- CE 510 Traffic Engineering Applications (4)
- CE 510 Bridge Engineering (4)
- CE 510 Geometric Design of Transportation Facilities (4)
- CE 510 Computer Aided Highway Design (4)
- CE 507 Benefit-Cost Analysis for Transportation (1)
- CE 507 Transportation Seminar (1)
- USP 537 Economics of Urban Transportation (3)
- USP 544 Urban Transportation Planning (3)
- USP 556 Urban Transportation Policies & Problems (3)
- USP 565 Pedestrian and Bicycle Planning (3)
- USP 570 Transportation and Land Use (3)
- USP 587 Travel Demand Modeling (3)
- USP 510 Discrete Choice Analysis (3)

Dual Master's Degree Program

Students can pursue dual master's in the MSCE and Master of Urban and Regional Planning (MURP) programs. For details: http://www.cts.pdx.edu/cts_dualdegree.pdf



EXCELLENT PLACEMENT RECORD

Our students and graduates typically easily find excellent internship and permanent employment opportunities with transportation agencies and consulting firms in the Portland region, in Oregon or along the West Coast. For detailed profiles about our fantastic alumni please see:

<http://www.its.pdx.edu/alumni.php>

Students are working or interning for: the Oregon Department of Transportation, City of Portland, Metro, TriMet, Washington Department of Transportation, City of Salem, DKS Associates, Kittelson and Associates, CH2MHill, URS, Parsons Brinckerhoff, Alta Planning + Design, City of Vancouver, IBI Group, David Evans and Associates, PTV America, Federal Highway Administration, Murray Smith & Associates, Group Mackenzie, WRG Design, Clackamas County, Parametrix, and more!!

TO APPLY

We look forward to your application. Please see:

<http://www.ce.pdx.edu/Gradapp.shtml> for the CEE Departmental application and

http://www.gsr.pdx.edu/ogs_general_admission.html for the University application (you must apply to both). The CEE Graduate Handbook is a great resource that will answer many of your questions

<http://www.ce.pdx.edu/GradHandbookCE-05.pdf>

If you have further questions please contact Dr. Bertini or Dr. Monsere (see below for contact information).

DEADLINES

Fall	Winter	Spring
April 1	September 1	November 1

Contacts

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

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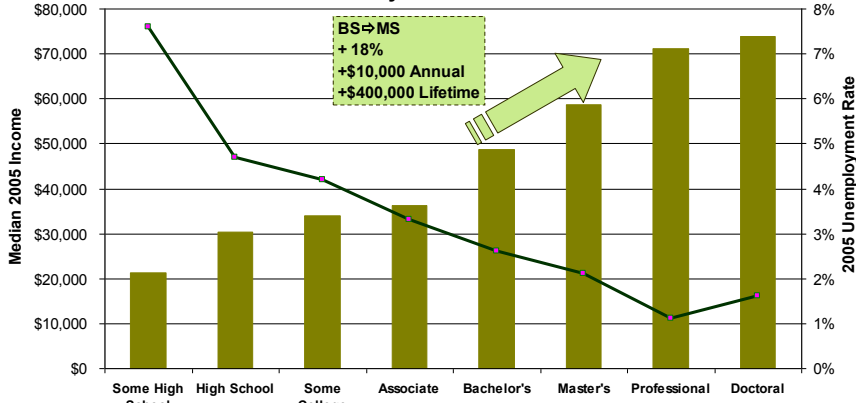
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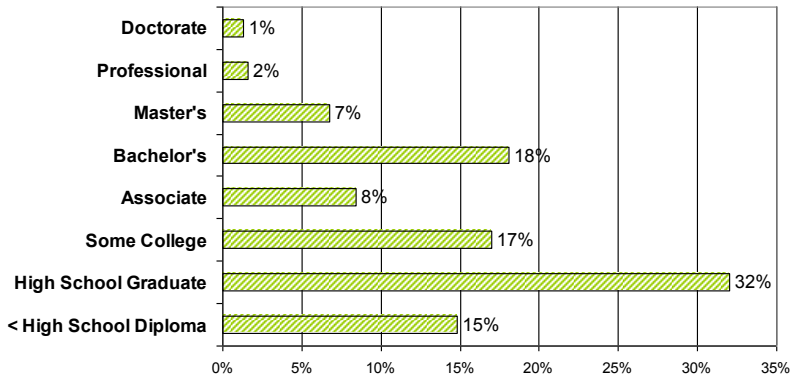
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Education Pays in the United States



Source: Bureau of Labor Statistics, Bureau of the Census (2005)

U.S. Educational Attainment 2004 (> age 25)



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