Center of Excellence in Applied Computing

Oregon Institute of Technology

Enhancing Innovation, Education, and Economic Growth

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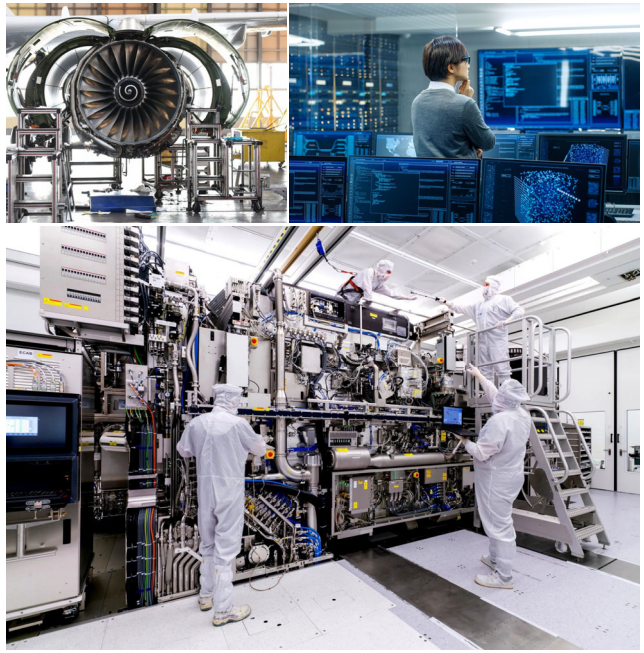
Introduction

- What is the Center of Excellence in Applied Computing?
- Oregon Institute of Technology Programs that will Benefit
- Benefits to Oregon Institute of Technology
- State-level impact
- State-level partners

What is the Center of Excellence in Applied Computing?

- A world-leading hub for applying advanced computing technologies to solve real-world problems
- Focus on hands-on equipment use, model-based problem solving, experimental design, and project-based work
- Development of man-machine-AI interfaces for both direct and remote access to high-value technological tools
- **Key Technological Fields:** Semiconductor, advanced manufacturing, high-performance computing, Healthcare



OIT Programs that Will Benefit

Geomatics Program

- Foundation for the Applied Computing Department

Collaborating Departments

- Computer Systems Engineering Technology
- Electrical Engineering and Renewable Energy
- Manufacturing and Mechanical Engineering and Technology
- Mathematics
- Natural Sciences

Supporting Programs

- Cybersecurity, Information Technology, Data Science
- Business Management, Mathematics, Health Science

Benefits to Oregon Tech

Enhancement of Educational Offerings

- Access to state-of-the-art technologies
- Hands-on learning experiences

Alignment with Oregon Tech's Mission

- Fostering student and graduate success
- Emphasizing innovation, scholarship, and applied research

Preparation for High-Demand Careers

- Creating job opportunities in advanced technological fields

Collaboration with Industry Partners

- Ensuring curriculum and research alignment with market needs

State-Level Impact

Economic Growth and Job Creation

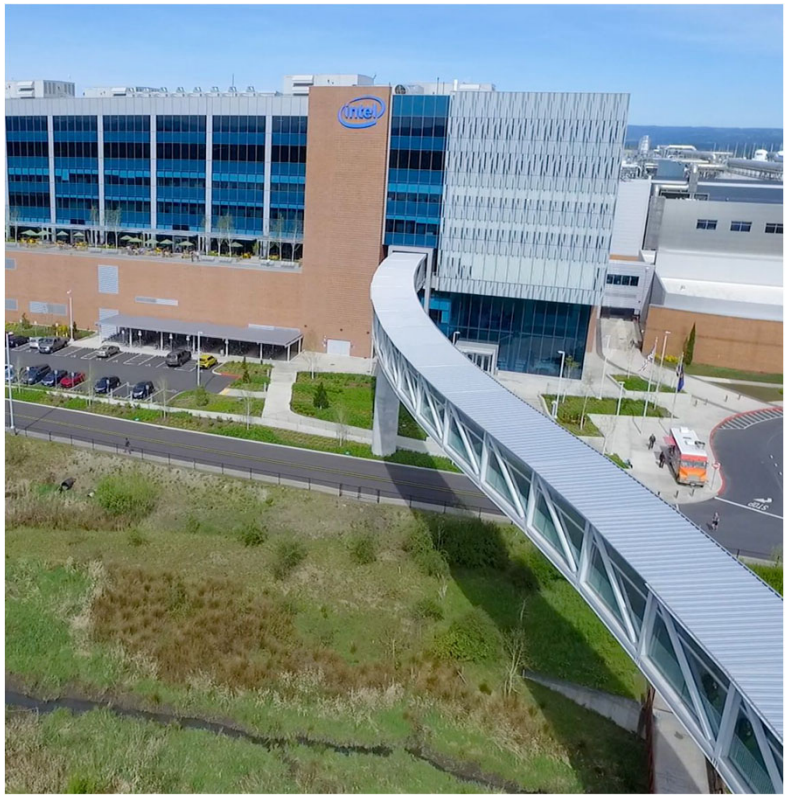
- Driving economic growth in critical sectors
- Creating quality jobs in semiconductors, advanced manufacturing, and renewable energy
- Upskilling the Workforce

Enhancing Regional Competitiveness

- Fostering inclusive innovation
- Ensuring equitable access to advanced tools and technologies

Support for Underserved Communities

- Impacting rural areas, tribal communities, and people with disabilities



State-Level Partners

- Link Oregon
- Technology Association of Oregon (TAO)
- Oregon Manufacturing Innovation Center (OMIC)
- Oregon Nanoscience and Microtechnologies Institute (ONAMI)
- Oregon Translational Research and Development Institute (OTRADI)
- Pendleton Unmanned Aerial Systems (PUR)
- Oregon Semiconductor Center of Innovation Excellence (OSCIE)
- Oregon Bioscience Incubator (OBI)
- Pacific Northwest National Laboratory (PNNL)
- Higher Education Council Commission (HECC)
- Hatfield School of Government
- Business Oregon
- Governor's Office State of Oregon

Strategic Goals

Developing a Skilled Workforce

- Training students and professionals in advanced computing technologies

Fostering Innovation and Research

- Encouraging interdisciplinary research and development

Building an Inclusive Innovation Ecosystem

- Ensuring broad access to technological tools and education

Grant Opportunities

Quantum Computing: $1.184Million awarded through the FY2025 Commerce-Justice-Science Appropriations Act

NSF 24-565: NSF Regional Innovation Engines: creates regional-scale, technology-driven, inclusive innovation ecosystem

NSF 24-530: Campus Cyberinfrastructure (CC*) Data Driven Networking Infrastructure for the Campus & Region

Future Ready Oregon: Advances a more equitable workforce system and aims to increase opportunities for a diverse workforce

Action Items

1. Develop significant grant capability and submit multiple grants.
2. Build Partnerships working with TAO and Business Oregon
3. Establish a Physical Center for Faculty and Students
4. Propose a program of micro credentials stackable into a Graduate Program
5. Hire Key Staff (Director)

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Q&A