AVEVA

Process Engineering Academic Program

Committed to investing in the future of the Chemical & Petroleum Engineering world.

The AVEVA Process Simulation Academic Program is offered to universities to help bring state-of-the-art process engineering tools into the classroom. This cloud-enabled offering provides access to industry-standard engineering software and next generation simulation tools including an extended reality environment.

We are offering:

Cloud-enabled access for AVEVA process engineering and simulation tools

The AVEVA Process Engineering Academic Program offers universities cloud-enabled access to AVEVA's process engineering and simulation tools. The standard program allows students and faculty to enroll every semester to access any combination of AVEVA™ Process Simulation, AVEVA™ PRO/II Simulation, and DYNSIM® Dynamic Simulation.

- Accessible from anywhere with a reliable internet connection – the classroom, the lab, the dorm, even from a coffee shop or back at home

- No license server install or VPN required, users simply access AVEVA's License-as-a-Service (LaaS) site via a web browser

- Free computer-based training – students can learn the basics on their own time and review as often as needed

- Access to FAQs and videos

- Access to sample academic simulations for professors

AVEVA Process Simulation (formerly SimCentral)

AVEVA Process Simulation is an innovative, integrated platform covering the entire process engineering lifecycle. AVEVA Process Simulation is the first available platform to take advantage of developing web-based and cloud technologies to deliver an enjoyable user experience so that students will be more productive, collaborative, creative and inspired.

- Groundbreaking ease of use with a responsive, intuitive interface based on modern standards such as undo/redo and notification badges.

- Change modes anytime and in any direction among flow-driven steady state mode (Process), pressure-driven rating (Fluid Flow) and Dynamics.

- See the underlying equations and extend them, or create completely new models with no programming.

AVEVA PRO/II Simulation (formerly PRO/II)

- The leading steady-state process engineering and simulation tool in refining

- Perform rigorous heat and material balance calculations for a wide range of chemical processes

DYNSIM Dynamic Simulation

- Create dynamic models to pair with controls emulation tools to simulate the dynamic response of real process plants

- Build plant digital twins to show students the behavior of real industry processes

AVEVA XR for Training

AVEVA XR for Training is a comprehensive Immersive Training Simulator solution that links control room operators to field operators and maintenance operators by means of a high-fidelity process simulation and virtual reality walkthrough plant environment. The University Virtual Crude unit model includes a photorealistic stereoscopic VR environment including a typical configuration with Desalters, Furnace, Preheat Train, Main Column, Side Strippers, and other typical unit operations.

- Designed to work with all current VR hardware

- Two modes of learning – self learning or instructor led

Online Training for Simulation Tools

Introductory Modules	Job Aids	Webinars	Workbooks
Detailed training modules for each software product	3 to 5 minute "how to" videos covering one technical topic in depth	1 hour recordings of live webinar presentations	Training workbooks for both the instructor and the student

Check out our Job aids and webinars now at aveva.com/training/simsci

ScimSci software is used by:

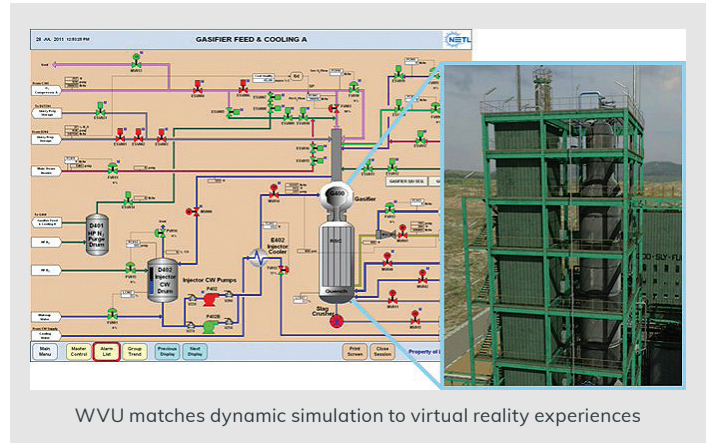| 24 of the top 25 refiners | 49 of the top 50 chemical companies | 35 of the top 50 nuclear power plants | All 15 top E&C companies |

West Virginia University

Uses 2D OTS and 3D XR as hands-on teaching tools in their Chemical Engineering curriculum. Benefits include:

- Demonstrate the real-life application of controls theory and the role that control systems play in operations

- Show students where course work fits into the real plant

- Reveal interactions between equipment/systems/variables

- Provide valuable operations experience to young engineers through limited but direct training on the OTS

WVU matches dynamic simulation to virtual reality experiences

University of Oulu

Uses DYNSIM Dynamic Simulation and advanced process control tools to bring to life the algorithms and technologies behind the real processes in their on-site pilot plant.

- Prepare students to innovate in a real working environment

- Launch students into the mining world fully equipped

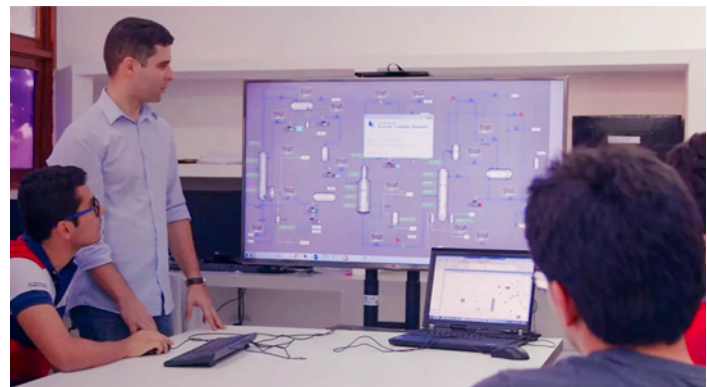- Transform classroom time to link theory to practice

Federal University of Campina Grande

Uses AVEVA Process Simulation to immerse Chemical Engineering students in new technologies.

- Open modeling environment provides a unique opportunity for students to see how a simulator works

- AVEVA software allows the inclusion of new routines and differential equations in simulator training

- Enables professors to better train future professionals

Oulu students see textbook theories applied in the pilot plant

UFCG prepares students for new technologies

Commonly-asked questions when considering the use of process simulators for higher learning

Question	Answer
How do I justify cost?	We use SimSci software in two courses: Computer Applications in Chemical Engineering and Process Simulation for training 3rd and 4th year students. We would recommend SimSci software to other Academic Institutions as it is easy to use and offers a competitive price. – Professor, Federal Government
How steep is the learning curve?	I highly recommend using the SimSci software because it is user friendly and helps students how to build models easily. – Dr. Zoltan Varga, Associate Professor, University of Pannonia The software is powerful and easy to apply in control applications. – Rubens Gedraite, Professor, Universidade Federal de Uberlandia
Where can I use this software beyond the senior design course?	I use it in my thermodynamics course for multicomponent processes and for liquid-liquid equilibrium. I use it in my separations course for LLE, distillation, and a few other processes for open ended design projects. It is used in the Plant design course extensively. It is also used in the heat and fluids unit operations course. – Claire Komives, Professor, San Jose State University
What is the impact of simulators on students' learning experience?	With SimSci, our students become familiar with the software and process modeling steps. SimSci also solidifies knowledge of certain subjects (reactor design, thermodynamics, vapour/liquid equilibrium). – Department Chair, Educational Institution
Do simulators reflect the real world?	Our students tell us that having PRO/II skills on their CV is helpful for getting their first job. – Jakob Huusom, Associate Professor, Department of Chemical and Biochemical Engineering, Technical University of Denmark With SimSci, our students are better trained and find jobs very quickly. – Abderrazak Latifi, Professor, Ensic

All quotations were solicited from our academic community via a TechValidate survey, conducted in April 2016.

For more information on the SimSci Academic Program, and flexible pricing options, please contact: **academic.program@aveva.com**

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