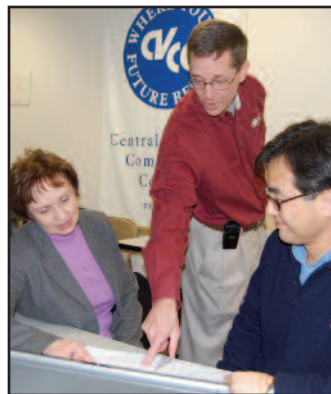


CGEP Classroom Technology

We deliver our courses through an IP-based videoconferencing delivery system. Advanced courses are delivered with a fully interactive two-way audio and high resolution video system. We offer live and archived stream video and data, combined with on-site presentation.



The Commonwealth Graduate Engineering Program is designed to work well for both the traditional student as well as the professional who wishes to pursue an advanced technical degree or take select courses based on his or her area of interest.

The Center for Advanced Engineering & Research staff at the CVCC Lynchburg campus delivers timely administrative support and guidance for your education needs.

About the CAER

The CAER is a non-profit organization that creates working partnerships between high-tech industries, major R&D centers, and university researchers to foster economic growth. These partnerships bring together public and private resources to fuel innovation and generate knowledge in Virginia's Region 2000.

For more information, please contact:

Nick Soukhanov
CGEP Program Director
434-832-7831
nis@caer.us
www.caer.us

What our grads are saying:



Rahul Mann
ME, Eng. Admin.-VT, 2008
Systems Engineer, Harris Corp.

“The program allowed me to pursue my graduate degree in tandem with my travel schedule. I could attend the class at the facility or watch it online when on the road.”



Mary Anne Kerr
ME, EE-UVA, 1992
Sr. Principle Engineer, Babcock & Wilcox

“Education should be an ongoing process and CGEP provides an excellent venue to continue growing in the engineering field.”



Van Hanson
ME, EE-VT, 1988; MBA-VT, 2003
Engineering Manager, Andrew Corp.

“The CGEP program allowed me to take technical graduate-level classes and receive master's degrees from leading Virginia universities.”



Center for Advanced Engineering & Research
CGEP Program
Main Campus CVCC
3506 Wards Road
Lynchburg, VA 24502



Virginia's Region 2000

Center for Advanced Engineering and Research

in partnership with the
Commonwealth Graduate Engineering Program

Classes held at CVCC

Spring 2010 SCHEDULE

Advanced engineering degrees in Lynchburg from:

VIRGINIA TECH

Civil Engineering
Electrical and Computer Engineering
Systems Engineering
Industrial Engineering
Mechanical Engineering
Education

UNIVERSITY OF VIRGINIA

Chemical Engineering
Civil Engineering
Electrical/Computer Engineering
Mechanical/Aerospace Engineering
Materials Science
Systems Engineering

OLD DOMINION UNIVERSITY

Electrical Engineering
Engineering Management
Modeling and Simulation

GEORGE MASON UNIVERSITY

Computer Science

VIRGINIA COMMONWEALTH UNIVERSITY

Electrical Engineering
Mechanical Engineering



A member of Virginia's Region 2000 Partnership

VIRGINIA TECH

Classes begin January 18, 2010

CIVIL ENGINEERING

CEE 4114/ CRN16794	Fundamentals of Public Health Engineering	7:00 – 9:45 pm	Tue	Vickesland
CEE 4634/ CRN16764	Infrastructure Condition Assessment	7:00 – 9:45 pm	Thur	Wang
CEE 5126/ CRN16808	Environmental Engineering Design II	4:00 – 6:45 pm	Wed	Knocke

ELECTRICAL AND COMPUTER ENGINEERING

ECE 5566/ CRN18061	Network Architecture and Protocols	7:00 – 9:45 pm	Wed	Staff
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**This is an on-line course*

ECE 5654/ CRN16879	Digital Communic. II: Adv Theory & Analysis	4:00 - 6:45 pm	Mon	Staff
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SYSTEMS ENGINEERING

ENGR 5004/Systems Engineering Process CRN16439		4:00 - 6:45 pm	Tue	Rahmandad
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INDUSTRIAL ENGINEERING

ISE 5134/ CRN16456	Management Information Systems	7:00 – 9:45 pm	Mon	Rahmandad
ISE 5164/ CRN17237	Transfer of Emerging Technology	4:00 - 6:45 pm	Thur	Harmon

MECHANICAL ENGINEERING

ME 5214/ CRN16458	Combustion	11:00-12-15 pm	T&R	Lattimer
ME 5424/ CRN16460	Turbomachinery	8:00-9:15 am	T&R	O'Brien
ME 5506/ CRN16832	Advanced Control Engineering	1:25-2:15 pm	M-W-F	Southward
ME 5714/ CRN16463	Digital Signal Processing	10:10-11:00 pm	M-W-F	Wicks
ME 5984/ CRN18734	Nuclear Engineering Fundamentals	5:00 – 6:15 pm	T&R	Pierse

EDUCATION

EDCT 5644/ CRNTBD	Curric. & Progr. Planning in Career & Technical	4:00 – 6:45 pm	Wed	Eschenmann
EDCT6604/ CRN TBD	Adminst. Leadership in Career & Technical Ed.	4:00 – 6:45 pm	Tue	Beard
EDCT6664/ CRN-TBD	Policy Analysis for Education and Work	4:00 - 6:45 pm	Tue	Stewart
EDCT 5644/ CRN16431	Current Planning Career for Technical Education	4:00 – 6:45 pm	Wed	Eschemann

TUITION: In-State: \$1,377.00 per 3 credit hours
Out-of-State: \$2,595 per 3 credit hours
CAER administrative fee: \$105 due first class
VT academic fee: \$140.25
Technology fee: \$10

Deadline: December 1, 2009.

Register at: www.grads.vt.edu/academics/programs/non_degree.html.

Expedited registration limited to six hours for one semester only. Deadline: January 15, 2010. Apply at CAER office on CVCC Campus.

OLD DOMINION UNIVERSITY

Classes begin January 9, 2010

ELECTRICAL ENGINEERING

ECE 677	Introduction to Nano Materials: Synthesis, Properties and Applications	12:00 – 12:50 pm	M-W-F	TBA
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ENGINEERING MANAGEMENT

ENMA 600	Cost Estimation/Financial Analysis	7:10 – 9:50 pm	Mon	Daniels
ENMA 601	Organizational Analysis	7:10 – 9:50 pm	Wed	Pazos-Lagos
ENMA 603	Operations Research	7:10 – 9:50 pm	Tue	Bowling
ENMA 604	Project Management	7:10 – 9:50 pm	Wed	Landaeta
ENMA 614	Quality System Design	7:10 – 9:50 pm	Mon	Kady
ENMA 641	Requirements Management, Verification and Validation	7:00 – 9:50 pm	Thur	Pinto
ENMA 703	Optimization Methods	7:10 – 9:50 pm	Wed	Rabadi
ENMA 713	Integrating Ethics & Engineering Mgmt.	7:10 – 9:50 pm	Thur	Daniels
ENMA 715	System Analysis	7:10 – 9:50 pm	Tue	Keating
ENMA 763	Robust Engineering Design	4:20 – 7:00 pm	Thur	Unal

MODELING AND SIMULATION

MSIM 505	Introduction to Discrete Event Simulation	4:20 – 5:35 pm	Tue	McKenzie
MSIM 601	Introduction to Modeling and Simulation	5:45 – 7:00 pm	Tue	Mielke
MSIM 607	Machine Learning I	4:20 – 7:00 pm	Thur	Li
MSIM 651	Analysis I	4:20 – 5:50 pm	Wed	Hester
MSIM 725	Principles of Combat Modeling & Simulat.	6:00 – 7:00 pm	Wed	Tolk
MSIM 730	Simulation Formalisms	7:10 – 9:50 pm	Mon	Weisel
MSIM 742	Visualization II	7:10 – 9:50 pm	Wed	Noor
MSIM 795	Topics in Modeling and Simulation	7:10 – 9:50 pm	Tue	Ferdjallah

TUITION: In-State: \$1,014 per 3 credit hours
Out-of State: \$2,532 per 3 credit hours
CAER administrative fee: \$105 per 3 credit hrs, due first class
ODU General Services Fee: \$9 per semester

Register at: www.leonline.odu.edu and click on "Leo Online News and Secure Area"

Deadline: January 8, 2010. Spring tuition due January 11, 2010

UNIVERSITY OF VIRGINIA

Classes begin January 20, 2010

CHEMICAL ENGINEERING

ChE 6630	Mass Transfer	3:30 – 4:45	T & Th	Ford
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CIVIL ENGINEERING

CE 6330	Finite Element Analysis	6:30 – 7:45 pm	M & W	Allaire
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ELECTRICAL/COMPUTER ENGINEERING

ECE 6502	Photovoltaics	2:00 – 3:15 pm	T & Th	Gupta
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ECE 7858	Digital Control Systems	3:30 – 4:45 pm	M & W	Tao
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MECHANICAL/AEROSPACE ENGINEERING

MAE 6430	*Statistics for Engineers and Scientists	5:00 – 6:15 pm	M & W	Richards
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**This is an on-line course. First class will be "live."*

MAE 6710	Finite Element Analysis	6:30 – 7:45 pm	M & W	Allaire
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MATERIALS SCIENCE

MSE 6167	Electrical, Optical, & Magnetic Prop. of Materials	6:30 – 7:45 pm	T & Th	Reinke
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MSE 6240	Kinetics of Transport & Transform. of Materials	5:00 – 6:15 pm	T & Th	Johnson
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SYSTEMS ENGINEERING

SYS 6018	Data Mining	8:00 - 9:15 pm	M & W	Elder
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TUITION: In-State: \$1,230 per 3 credit hours
Out-of-State: \$2,010 per 3 credit hours
CAER administrative fee: \$105 per 3 credit hours (paid at registration)
UVA technology fee: \$5 per credit hour
Registration, tuition and fees due one week prior to the first session
Register at: www.scps.virginia.edu/SIS/ **Deadline:** January 12, 2010

GEORGE MASON UNIVERSITY

THE VOLGENAU SCHOOL OF INFORMATION TECHNOLOGY & ENGINEERING

Classes begin January 19, 2010

** All computer science courses are online*

COMPUTER SCIENCE

CS 540	Language Processors	4:30 -7:10 pm	Mon	White
CS 555	Computer Communication and Networking	7:20 – 10:00 pm	Mon	Pullen
CS 571	Operating Systems	4:30 – 7:10 pm	Wed	Aydin
CS 580	Introduction to Artificial Intelligence	7:20 – 10:00 pm	Mon	Tecuci
CS 583	Analysis of Algorithms	4:30 – 7:00 pm	Thur	Kosecka
CS 635	Foundations of Parallel Computation	7:20 – 10:00 pm	Wed	Wang
CS 662	Computer Graphic Games Technology	4:30 – 7:10 pm	Wed	Allbeck
CS 795	Biological Sequence Analysis	7:20 – 10:00 pm	Mon	Rangwala
ISA 656	Network Security	4:30 – 7:10 pm	Thur	Wang
SWE 619	Object Oriented Software Specification	7:20 – 10:00 pm	Tue	Baldo
SWE 620	Software Requirements Analysis & Specification	7:20 – 10:00 pm	Thur	Armour
SWE 621	Software Model/Architecture Design	4:30 – 7:10 pm	Wed	Gomaa
SWE 622	Distributed Software Engineering	7:20 – 10:00 pm	Wed	Malek
SWE 625	Software Project Management	7:20 – 10:00 pm	Mon	Nidiffer

TUITION: In-State: \$1,410 per 3 credit hours
Out-of-State: \$2,784 per 3 credit hours
CAER administrative fee: \$105 due first session
First time CGEP student application fee: \$60
ADMISSION: www.volgenau.gmu.edu/admissions/graduate/php
REGISTRATION: <http://registrar.gmu.edu/registration/index.html>
Deadline: January 19, 2010.

VIRGINIA COMMONWEALTH UNIVERSITY

Classes begin January 19, 2009

ELECTRICAL ENGINEERING

EGRE621	Spintronics	11–12:15 pm	M & W	Bandyaopadhyay
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MECHANICAL ENGINEERING

ENGRM 561-C90	Advanced Fluid Dynamics	5:30 – 6:45 pm	M & W	Longest
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ENGRM 680-C90	Advanced Flow Control	11:00 – 12:15 pm	T & Th	Gad-el-Hak
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SYSTEMS ENGINEERING

ENGR591-C90	Probability Risk Assessment	5:50 – 6:45 pm	T & Th	Anderson
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TUITION: (Latest rates not yet available. Rates below are based on previous rates)

In-State: *\$1,578 per 3 credit hours
Out-of-State: *\$2,826 per 3 credit hours

** University and technology fees included.*

CAER administrative fee: \$105 per 3 credit hours

REGISTRATION: Students with VCU accounts: www.enrollment.vcu.edu/rar

First time registration students: Call 804.828.2228.

Deadline: January 19, 2010