Commonwealth Graduate Engineering Program

2011-2012 Annual Report &
2012-2013 Operating Plan

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James Groves, UVA Director
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May 22, 2012
Highlights of Activities

• Increase the knowledge, skills, abilities and educational levels of Virginia’s engineers

• Alignment of programs with the technology sectors specifically targeted by the Virginia Economic Development Partnership (VEDP) and the Commonwealth of Virginia

• Increase collaboration among faculty at CGEP universities.
Highlights of Activities

• General stability in course enrollments
• This year experienced a 10% increase in overall student enrollment
• Attributed to marked increase in internet based course enrollment
Highlights of Activities

• UMW Dahlgren Campus Center for Education and Research Dedication was February 17, 2012

• CAER celebrated it's Grand Opening and Ribbon Cutting ceremony was August 25, 2011
Webinar Series

• Offered five webinars on cyber security
• Each university hosted a seminar
• Seminars were offered monthly throughout the academic year
• Advertised broadly: CGEP institutions, CGEP partners, and CGEP advisory board member companies
Webinar Series

- 24 October 2011: Pervasiveness of computing and cybersecurity in an interconnected world, Gurpreet Dhillon
- 8 November 2011: VT – IPv6 at Virginia Tech, Randolph Marchany
- 8 February 2012: GMU – Toward Proactive Mitigation of Advanced Multi-tier Botnets, Brent ByungHoon Kang
- 2 April 2012: ODU – Cybersecurity Risk Governance, Adrian Gheorghe
- UVA – Cryptography and Security, Abhi Shelat
The session met its stated learning objectives. The subject matter was presented effectively. The pace of the webinar was satisfactory. The duration of the webinar was sufficient for the material covered. The trainers were knowledgeable. As a result of this training, I gained new knowledge applicable to my work. I plan to apply what I learned in this webinar.

May 22, 2012
Webinar Series Update

Survey Results Continued

Selected Survey Comments

- It was an interesting presentation that provided an easy way to remain up to date on security related topics.
- IT security is a hot topic in our organization at the moment. Any webinars on this subject are valuable.
- Flexibility and instruction set. All went very smoothly! Having it recorded and being able to listen to it at a later date also a big plus!
- I will use this information as an as needed basis.

May 22, 2012
Delivery Method Transition

• Moving to online delivery

http://www.elluminate.com/Products/Elluminate_Learning_Suite/Elluminate_Live/?id=79/

May 22, 2012
Online Delivery

- Online enrollment increased 54% over last year
- 36% of total enrollment was online up from 25% last AY
- Contributed to a 10% increase in overall enrollment
- Transition is resource-intensive

UVA faculty member teaching in classroom and Online with guest expert joining in class instruction

May 22, 2012
Resources Required

• New hardware
  – At the classroom, instructor, and student level

• New software
  – For the class environment itself, for use during class sessions, for class backup, and for out-of-class connections

• New processes
  – For faculty and student training, for handling of student materials, for support of class sessions, and for tracking of system performance
Massively Open Online Courses

• Several online graduate engineering programs: Purdue, UIUC, Iowa State, WPI, etc.
• New Model: Stanford, MIT, Georgia Tech, Udacity, Udemy
  – Leading experts offering online courses with open enrollment free of charge
• Stanford University
  – Artificial Intelligence: 160,000 students, 190 countries, 44 languages
  – Machine Learning: 13,000 completed
  – Introduction to Databases: 7,000 completed
Massively Open Online Courses

• Are these courses viewed favorably by employers?
• Will these classes offer credentialing that employers value?
• What are the implications to continuing education programs?
• What do employers want?
Massively Open Online Courses

- Opportunity for supplemental instruction/training
- Informative: a low cost introduction to topics
- Employers investigate with due diligence
- Not seen as a credentialing option. BS and MS degrees viewed as premier credentialing tools
- Continue to monitor
Critical Topics

- Improvements in seminar series
- Closer relationships with companies
- Advertising/Marketing
- Remaining aligned with Strategic Plan
Final Thoughts

• New State Chair: Linda Vahala from Old Dominion University

• In our quest for continuous improvement quality online courses and programs requires resources

• Special Thanks
  – Directors
  – Administrators
  – Volunteer Advisory Board
  – SCHEV’s continued support