

Memo To: Faculty Senate  
From: Missouri S&T Campus Curriculum Committee Meeting  
RE: March 2, 2010 Meeting

**The Missouri S&T Campus Curricula Committee recommends to the Faculty Senate that the curriculum changes and degree proposals on the following DC forms be approved.**

**Approved CC forms:**

CC 7923, Computer Engineering 342, Real-Time Digital Signal Processing. The following change is approved effective Fall 2010.

Prerequisites – Present: Cp Eng 213 and EE 267

Proposed: EE 215 or EE 267

CC 7926, Mining Engineering 407, Theory of High Explosives. The following changes are approved effective Fall 2010.

Catalog Description – Proposed: Study of the application of chemical thermodynamics and the hydrodynamic theory to determine the properties of high explosives; application of detonation theory to steady-state detonations in real explosives; application of the above to the blasting action of explosives.

Prerequisites – Present: Mi Eng 307

Proposed: Mi Eng 307, Successful background check

CC 7927, Mining Engineering 351, Demolition of Building and Structures. The following change is approved effective Spring 2011.

Prerequisites – Present: Preceded or accompanied by IDE 50 or 140; US citizen or permanent resident, \*Requirement due to Safe Explosives Act – January 2003.

Proposed: Preceded or accompanied by IDE 50 or 140; US citizen or permanent resident, \*Requirement due to Safe Explosives Act – January 2003; Successful background check.

CC 7928, Mining Engineering 307, Principles of Explosives Engineering. The following change is approved effective Fall 2010.

Prerequisites – Present: Accompanied or preceded by either Cv Eng 215 or Geo 220 or Geo 125

Proposed: Min 151; accompanied or preceded by Cv Eng 215 or Geo 220 or Geo 125; Successful background check

CC 7929, Mining Engineering 305, Explosives Handling & Safety. The following change is effective Fall 2010.

Prerequisite – Present: Min 151 and Min 307

Proposed: Min 151, Min 307, Successful background check.

CC 7930, Mining Engineering 110, Surveying for Mineral Engineers. The following change is approved effective Fall 2010.

Prerequisites – Present: Math 6, accompanied or preceded by Min Eng 3 and Min Eng 50

Proposed: Math 6, accompanied or preceded by Min Eng 3

CC 7931, Mining Engineering 350, Blasting Design and Technology. The following change is approved effective Fall 2010.

Prerequisite – Present: Min 307, Student must be at least 21 years of age

Proposed: Min 307, Student must be at least 21 years of age, Successful background check

CC 7932, Mining Engineering 406, Scientific Instrumentation for Explosives Testing and Blasting. The following change is approved effective Fall 2010.

Prerequisite – Present: None

Proposed: Successful background check

CC 7933, Mining Engineering 402, Environmental Control of Blasting. The following change is approved effective Fall 2010.

Prerequisite – Present: Mi Eng 307

Proposed: Min Eng 307, Successful background check

CC 7934, Mining Engineering 313, Stage Pyrotechnics and Special Effects. The following change is approved effective Fall 2010.

Prerequisites – Present: Chem 1, US Citizen or permanent resident (to fulfill the requirements of the SAFE EXPLOSIVE ACT 2003), Resident enrollment at MS&T (e.g. not distance or internet)

Proposed: Chem 1, US Citizen or permanent resident (to fulfill the requirements of the SAFE EXPLOSIVE ACT 2003), Successful background check, Resident enrollment at MS&T (e.g. not distance or internet)

CC 7937, English 374, Southern Culture. New course approved effective Fall 2010.

Catalog Description: Introduction to major issues in the history and culture of the recent American South. Non-fiction, fiction, memoir, autobiography, journalism and film explore the social, economic, and political transformations of the region in the last half-century.

Credit Hours: 3 hour lecture

Prerequisite: English 20 and one semester of literature

CC 7939, Technical Communication 409, Web-Based Communication. New course approved effective Spring 2011.

Catalog Description: Covers such topics as advanced writing and editing for the web; the creation of rhetorically effective websites; the use of blogs, wikis, and other web genres to communicate technical information.

Credit Hours: 3 hour lecture

Prerequisites: None

CC 7967, ERP 345, Use of Business Intelligence. The following changes are approved effective Fall 2010.

Catalog Description – Proposed: This course introduces data-oriented techniques for business intelligence. Topics include Business Intelligence architecture, Business Analytics, and Enterprise Reporting. SAP Business Information Warehouse, Business Objects, or similar tools will be used to access and present data, generate reports, and perform analysis.

Prerequisite – Present: ERP 346 or BUS 426; database experience

Proposed: ERP 246 or BUS 426 or ERP 346 (ERP 346 may be taken concurrently).

CC 7968, ERP 448, Enterprise Performance Management System Prototyping. The following change is approved effective Fall 2010.

Prerequisite – Present: ERP 345

Proposed: ERP 444 or IST 444

**For the information of the Faculty Senate, the following EC forms have been submitted by the University departments for an experimental course that will be offered in the near future.**

**Approved EC forms:**

EC 2231, Electrical Engineering 301, Introduction to Radar Systems, approved effective Fall 2010.

Course Description: Introducing basics of radar systems and applications.

Credit Hours: 3 hour lecture

Prerequisites: EE 271; EE 267 or 217

EC 2233, Mining Engineering 401, Ventilation and Mine Fire Simulation, approved effective Fall 2010.

Course Description: A study of the effects of fires on the mine ventilation system, including the principle of combustion, source of ignition underground, dynamics of the mine ventilation system during mine fires, monitoring systems, the simulation of mine fires with modern software and use of inertization systems for suppression and other fire-fighting strategies.

Credit Hours: 2 hour lecture, 1 hour lab, Total: 3

Prerequisite: Min Eng 318

EC 2235, Civil Engineering 301, Advanced Traffic Signal Operations, approved effective Fall 2010.

Course Description; Discuss the role and function of a traffic signal components: the signal controller, conflict monitor, vehicle detectors, etc. Discuss layout of traffic signal hardware at an intersection. Discuss the phasing/timing of traffic signals in details.

Credit Hours: 3 hour lecture

Prerequisites: Civ Eng 353

EC 2236, Technical Communication 201, Engineering Management 201, Technical Presentations, approved effective Fall 2010.

Course Description: Students will practice conveying technical information to a range of audiences using multiple delivery methods.

Credit Hours: 3 hour lecture

Prerequisites: English 65 or Tech Com 65

C 2237, Technical Communication 301, Usability Studies, approved effective Fall 2010.

Course Description: Students in the course will study and apply methods used by technical communicators to evaluate usability. Students will study methods used to evaluate human interaction with communication tools and how to make those products more suitable for human use.

Credit Hours: 3 hour lecture

Prerequisites: English 65 or Tech Com 65

EC 2239, ERP 301, Enterprise Portal Application Development, approved effective Spring 2011.

Course Description: This course provides a conceptual foundation and hands on experience in web based applications development deployed through an Enterprise portal platform. SAP Netweaver Enterprise Portal and tools including Visual Composer and Web Dynpro will be used to develop the applications.

Credit Hours: 3 hour lecture

Prerequisites: IST 51 or equivalent; ERP 246 or ERP 346 (ERP 346 may be taken concurrently)

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J. Keith Nisbett, Chair  
Missouri S&T Campus Curricula Committee