TO: All Members, University Curriculum Committee; Department Chairs
FROM: Mark Jackson, Chair, University Curriculum Committee
832-2650; jacksonmae@ccsu.edu
SUBJ: Primary Agenda for the 6th Round of Curriculum Meetings (R1)

If you have an item on the agenda, please make sure that someone with knowledge of the proposal attends all subcommittees to which the item is assigned. That means that if your proposal is assigned to the AS and GR committees, you or a representative must attend both subcommittee meetings. Abbreviations used in the agenda are:

AS – School of Arts and Sciences Curriculum Subcommittee
SEPS – School of Education and Professional Studies Curriculum Subcommittee
BUS – School of Business Curriculum Subcommittee
SET – School of Engineering and Technology Curriculum Subcommittee
GE – General Education Curriculum Subcommittee
GR – Graduate Studies Curriculum Subcommittee

Final Round Submission Deadline: Friday, April 5, noon *(For School of Arts and Sciences, please see reminder #1 above)*	SEPS Subcommittee	4/16/13	12:15 PM	HB 222
	Business Subcommittee	4/17/13	1:15 PM	RVAC 466
	A&S Subcommittee	4/17/13	3:15 PM	RVAC 105
	SET Subcommittee	4/18/13	12:30 PM	NC 204 conference room
	Grad Studies Curriculum	4/18/13	3:00 PM	Clocktower, Student Center
	Gen Ed Subcommittee	4/24/13	3:15 PM	Philbrick, Student Center
	Graduate Studies	4/25/13	3:00 PM	Camp Room Student Center
	Full Curriculum Committee	5/1/13	3:15 PM	RVAC 105

The full schedule of meetings can always be found by clicking on this link: "**Committee Calendar**." If an agenda item lacks a sponsor qualified to answer questions about the item, it will automatically be postponed to the next round of meetings in all subcommittees.

For committee members, please attend all subcommittees to which you are assigned (check membership by clicking on "**Subcommittee Assignments**.")

REMINDERS:

- There is a new version of the shadow catalog. The link is here: http://www.ccsu.edu/page.cfm?p=14778 .The password is newcat123
- If you are creating a new course, don't forget to check with Matthew Bielawa (bielawam@mail.ccsu.edu) for available course numbers.

Primary Agenda

A. Review minutes of previous meetings

B. Announcements

1. Will all curriculum reps please go to the shadow catalog http://www.ccsu.edu/page.cfm?p=14778 (password is newcat123). Please check that the items your department submitted this year are correctly listed in the shadow catalog. When you are done, please send me an email confirming that everything looks correct, or tell me specifically what needs to be corrected. This will make the transition to the new catalog much easier and more accurate over the summer.

2. BOR Procedures for program revisions and significant program revisions

C. Old Business:

Educational Leadership & Educational Technology		
C1.1	**Course revision** EDL 590 leaders as Learners: Educational leadership and Self-Assessment Prereq.: Admission to the Sixth Year Certificate program; or permission of department chair. Self-assessment of leadership. Discussion of self-awareness as the cornerstone of effective leadership. Exploration of State and national standards, learning and leading styles, the impact of cultural and experiential background, and values and beliefs concerning educational leadership. Spring, Summer. [GR]	**SEPS** **GR**
C1.2	**Course revision** EDL 605 Leadership in Teaching and Learning I Change preqs to: Admission to the Sixth-Year Certificate program and EDL 590	**SEPS** **GR**
C1.3	**Course revision** EDL 610 School Leadership I	**SEPS**

	Change preqs to: Admission to the Sixth-Year Certificate program and EDL 590	**GR**
C1.4	**Course revision** EDL 615 Understanding External Environments of School Change preqs to: Admission to the Sixth-Year Certificate program and EDL 590	**SEPS** **GR**
History		
C2.1	Course Addition : Hist 502 Historiography	**GR** **AS**
C2.2	Course Addition: HIST 530 Seminar in Ancient History Amended: (approved by AS & GR) Change prereqs to :Admission to the M.A. Program in History or Public History or permission of department chair New proposed amendment: Prerequisite or corequisite: History 501 or 502. If the student has not taken History 501 or 502, please see department chair or M.A. coordinator for permission to enroll.	**GR** **AS**
C2.3	Program Revision MASTER OF ARTS IN HISTORY	**AS** **GR**
Journalism		
	Program Revision Minor in Journalism Add JRN 340 Introduction to Broadcast News	**AS**

	Add JRN440 TV News Practicum	
	Program Addition Major in Journalism Current: Broadcast Sequence 18 credits a. Required JRN 340 Introduction to Broadcast News COMM 330 Digital Film and Television Production COMM 427 Digital Film and Television Production II COMM 230 Introduction to Mass Media Or COMM 255 Visual Communication Change to: Broadcast Sequence 18 credits a. Required JRN 340 Introduction to Broadcast News 3 JRN 440 TV News Practicum 3 and Either COMM 230 Introduction to Mass Media 3 Or COMM 255 Visual Communication 3	**AS**
Theater		
C3.1	**Course Revision**: TH 111 Stagecraft Changing the credits from 0-3 to 3 Approved at AS No representative at GE	**AS** **GE**
C3.2	**Program revision** Major in Theatre, B.F.A.	**SET**

	This was approved at AS Move TH 347 Acting III 3 from guided electives to core courses No representative at SEPS	
Manufacturing and Construction Management		
C4.1	**Program Addition** BS Manufacturing Management BS – **Manufacturing Management (NEW)** Major Requirements (45 credits) CET 113Intro to Info Processing TM 120 Intro to Technology Mgt TM 121 Mechanical CAD TM 190 Global Quality Mgmt Systems MM 216 Manufacturing Processes AC 210 Industrial Accounting MGT 295Fundamentals of Management MKT 295Fundamentals of Marketing TM 310 EH&S MM 360 Production Systems TM 362 Leading Project Teams MM 366 Supply Chain and Purchasing Strategies TM 401 Senior Seminar and Internship TM 464 Six Sigma Quality MM 390 Lean Operations Management **Directed Electives (w/advisor) (12 credits)** **Electives (12 credits)** MM 226 Principles of CNC MM 236 Tool Design MM 324 Fluid Power TM 480 Robotics or CM 335Construction Safety TM 411 Industrial Hygiene TM 414 Accident Investigation TM 456 Hazardous Material Management **General Education** Study Area I -Arts and Humanities (9) Literature 3 3 3 Study Area II - Social Sciences (9)	**SET**

	ECON 201 3 Historical 3 3 Study Area III - Behavioral Sciences (6) PSY 112 ** 3 3 Study Area IV - Natural Scientific (6) PHYS 111 w/lab 3 CHEM 161/162 w/lab 3 Skill Area I - Communication Skills (6) ENG 110* 3 ENGR 290 3 Skill Area II - Mathematical (6) STAT 104 * 3 Math 115 3 Skill Area III Foreign Language Skill Area IV Univ Requirement 2-3 This item is awaiting approval of previous items	
Physical Education		
C5.1	**Program Revision** Major in Physical Education, B.S. Ed. A new program revision has been submitted. See New Business	**SEPS**
C5.5	**Course Addition** PE 150 Fitness/Wellness for Educators GE is being asked to review how PE150 will be used for Skill Area IV Pending Deans Signature A new proposal will be submitted next month that modifies PE 144	**SEPS** **GE**

D. New Business:

REPORT AND PROPOSAL FROM THE AD HOC COMMITTEE ON FOUR CREDIT COURSES		
1.1	I am asking each subcommittee to review and comment on the report and proposal from the Ad Hoc Committee on Four Credit courses. (see link)	**AS** **SEPS** **SET** **BUS** **GR**
ART		
2.1	**Course Revision** ART 362 Sculpture III Change number to ART 462 and add GR credit	**AS** **GR**
Biology		
3.1	**Program Revision** Minor in Science Change Chem 163/164 to (200 or 260) plus 201	**AS** **SET**
Chemistry		
4.1	**Program Revision** Major in Chemistry, B.S. (Certifiable for secondary teaching) Revise chem courses Add ESCI 121 Note: "Related Requirements" should be 22, not 26	**AS** **SEPS**

Computer Elec & Graphics Tech		
5.1	**Course revision** CET 201 Photonics Principles Exploration of light, the laws of reflection and refraction and how they apply to several devices. Examination of wavelike behavior of light. An overview of fiber optics and optical image is presented. Two hours lecture and three hours laboratory, course meets five hours per week.	**SET**
5.2	**Course revision** CET 223 Basic Electrical Circuits Operation of DC circuits including voltage, current, resistance, power electromagnetism, capacitance, inductance, and basic theorems. Laboratory experiments involve building circuits and using instruments to measure quantities. Two hours lecture and three hours laboratory, course meets five hours per week. No credit given to those with credit for CET 236.	**SET**
5.3	**Course revision** CET 229 Computer Hardware Architecture Laboratory based course emphasizing the computer architecture and related components. Analyzing and troubleshooting the interrelationships between the operating system, computer hardware, and peripheral devices. Two hours lecture and three hours laboratory, course meets five hours per week.	**SET**
5.4	**Course revision** CET 233 Advanced Electrical Circuits Reactance and power concepts in AC. Phasor analysis of RC, RL and RCL circuits, resonance, and filters. Laboratory experiments involve building circuits, using instruments to measure quantities, and observing phenomena. Two hours lecture and three hours laboratory, course meets five hours per week. No credit given to those with credit for CET 236.	**SET**
5.6	**Course revision** CET 236 Circuit Analysis Basic concepts and laws, methods of analysis and circuit theorems in DC and AC circuits. Topics include voltage, current, power, resistance, capacitance, inductance, node analysis, mesh, analysis, Thevenin's theorem, Norton's theorem, phasors, transfer functions, steady state and transient analysis. Laboratory experiments involve building circuits, using instruments to measure quantities and observe phenomena. Two hours lecture and three hours laboratory, course meets five hours per week.	**SET**

5.7	**Course revision** CET 243 Analog Electronics I Semiconductor and the p-n junction theory. Structure, parameters, performance characteristics, of diodes, bipolar and field effect transistors, operational amplifiers and special semiconductor devices. Basic circuit analysis, synthesis, and laboratory experiments; emphasize building circuits, troubleshooting, and using instruments to measure quantities, and observe phenomena. Two hours lecture and three hours laboratory per week.	**SET**
5.8	**Course revision** CET 301 Fiber-Optics Communications Introduction to fiber-optic communication systems. Optical detectors and receivers. Coherent light wave systems. WDM communication systems and optical amplifiers. Two hours lecture and three hours laboratory, course meets five hours per week.	**SET**
5.9	**Course revision** CET 323 Analog Electronics II Discrete and linear integrated circuits and their applications. Topics include multistage and power amplifiers, operational amplifiers, oscillators, voltage and current regulators, passive and active filters. Analysis, synthesis, and laboratory experiments emphasize building circuits, simulation, troubleshooting, and using instruments to measure quantities and observe phenomena. Two hours lecture and three hours laboratory, class meets five hours per week.	**SET**
5.10	**Course revision** CET 339 Computer System Administration Laboratory course emphasizing concepts, tools, and application of technologies related to computer system administration. Includes the design, implementation, management, and maintenance of a state-of-the-art network operating system. Two hours lecture and three hours laboratory, course meets five hours per week.	**SET**
5.11	**Course revision** CET 346 Signals & Systems 3 credits, not 4 Signal representation, applications of Fourier series, Fourier transform, Laplace transform, and Z-transform in the analysis of circuits and systems. Two hours lecture and three hours laboratory, course meets five hours per week.	**SET**

5.12	**Course revision** CET 363 Digital Circuits Principles and applications of digital circuits, number systems, Boolean Algebra, combinatorial and sequential logic circuits, arithmetic circuits, and MSI logic circuits. Laboratory experiments focus on circuit building and troubleshooting using TTL integrated circuits. Two hours lecture and three hours laboratory, course meets five hours per week.	**SET**
5.13	**Course revision** CET 405 Applied Topics in Computer Electronics Technology A laboratory oriented course providing comprehensive study of a selected technological topic. May be used as an elective on a graduate student's planned program of study with the permission of the program advisor. Course may be repeated for a maximum of 6 credits for different topics. Two hours lecture and three hours laboratory, course meets five hours per week.	**SET**
5.14	**Course revision** CET 453 Microcomputers Microcontroller architecture including basic memory design, address decoding and internal register structure, and assembly language programming including addressing modes and instruction set. Laboratory work consists of programming and interfacing experiments. Projects focus on solving real world problems following a standard development process. Two hours lecture and three hours laboratory, course meets five hours per week.	**SET** **GR**
5.15	**Course revision** CET 443 Electronic Communications Radio Frequency transmitting and receiving circuits, modulation and detection techniques, noise in circuits and systems, transmission lines, antennas analog and digital communications. Analysis and synthesis laboratory experiments emphasize building circuits, troubleshooting, and using instruments to measure quantities and observe phenomena. Two hours lecture and three hours laboratory, course meets five hours per week.	**SET** **GR**
5.16	**Course revision** CET 449 Advanced Networking 4 credits, not 3 Major emphasis on switching and STP, VLANs and InterVLAN routing. Basic Wireless concepts and configuration. In-depth focus on WAN technology, theory and design including serial communication, HDLC, PPP, Frame Relay. Secure router management and ACL creation. Lab includes	**SET** **GR**

	hands-on switching and routing configuration and troubleshooting Layer 2 and Layer 3 networking equipment and software. Two hours lecture and three hours laboratory, course meets five hours per week.	
5.17	**Course revision** CET 466 Logic Design Prereq: CET 363. Use of hardware design languages to implement digital design, including modular combinational circuits, flip-flops, latches, counter and synchronous sequential circuits in programmable devices such as FPGA. Two hours lecture and three hours laboratory, course meets five hours per week.	**SET** **GR**
5.18	**Course Addition** CET 463 Advanced Microcomputers	**SET**
5.19	**Course revision** GRT 212 Graphic Arts Processes Skill Area IV A course designed to provide the student with a basic working knowledge of the printing industry. Printing, duplicating, and copying processes are included. Two hours lecture and three hours laboratory, course meets five hours per week.	**SET** **GE**
5.20	**Course revision** GRT 232 Introduction to 3D Animation Technology Prereqs: GRT 112 and CS 110; or permission of instructor Wire frame modeling applications will be introduced. Topics include the creation of basic geometric shapes; editing the model structure; animating and rendering the animation. Two hours lecture and two hours laboratory, course meets four hours per week.	**SET**
5.21	**Course revision** GRT 342 Screen & Specialty Printing Manufacturing Application and techniques for screen and specialty printing on a variety of substrates. Issues and processes control concerns related to the image transfer methods. Two hours lecture and three hours laboratory, course meets five hours per week.	**SET**
5.22	**Course revision** GRT 352 Color Management & Analysis Scientific study of color, perception and measurement principles, protocol for tolerances and targeting, and quality control practices of graphic color	**SET**

	systems. Emphasis on the connection of color science to the graphic industry and state-of the art measurement equipment and software. Students will deploy color profiling, color management, color targeting and tolerance development to industry relevant applications. Two hour lecture and three hour laboratory, course meets five hours per week.	
5.23	**Course revision** GRT 405 Applied Topics in Graphics Technology A laboratory oriented course providing comprehensive study of a selected technological topic. May be used as an elective on a graduate student's planned program of study with the permission of the program advisor. Course may be repeated for a maximum of 6 credits for different topics. Two hours lecture and three hours laboratory, course meets five hours per week.	**SET**
5.24	**Course deletion** GRT 411 Instructional Methods in Animation Graphics	**SET**
5.25	**Course deletion** GRT 412 Instructional Methods in Computer-Aided Publishing	**SET**
5.26	**Course revision** GRT 442 Print Production GRT 212 or permission of instructor Applied study of pre-production, production, and post-production in the printing industry. Two hours lecture and three hours laboratory, course meets five hours per week.	**SET** **GR**
5.27	**Course revision** GRT 462 Advanced Graphic Arts Techniques GRT 442 or permission of instructor Integrated experience of advanced instruction in both flexo, offset and digital printing. Experiences will include advanced color work and direct to press operations. Cultural and historical aspects of graphic arts and industrial visitations. Two hours lecture and three hours laboratory, course meets five hours per week.	**SET** **GR**
5.28	**Course revision** GRT 472 Digital & Film Photography Principles of conventional and digital camera techniques. Includes camera	**SET**

	handling, exposure, composition, developing, printing, and editing. Darkroom plans and equipment listings will be evaluated. Student must provide 35mm digital camera. Field trips to selected photography studios. Two hours lecture and three hours laboratory, course meets five hours per week.	**GR**
5.29	**Program revision** Major in Electronics Technology, BS (122 credits) Need signatures from A&S	**SET**
5.30	**Program revision** Major in Computer Engineering Technology, BS (124 credits) Need signatures from A&S	**SET**
Counseling and Family Therapy		
6.1	**Program Revision** PROFESSIONAL AND REHABILITATION COUNSELING Add "CNSL 505 Counseling and Human Development Across the Lifespan 3 or Psy 512 Developmental Psychology 3" to core	**AS** **SEPS** **GR**
Criminology and Criminal Justice		
7.1	**Course Revision** CRM 245 Diversity and Criminal Justice Add "d-designation" for Reginald Simmons	**AS** **GE**
Educational Leadership		
8.1	**Course Deletion** EDL 551 Curriculum Leadership	**SEPS** **GR**
8.2	**Course Deletion** EDL 513 Supervision	**SEPS** **GR**

8.3	**Course Addition** EDL 520 Instructional Programs for Diverse Learners Note: should this be ED or EDL?	**SEPS** **GR**
8.4	**Course Addition** EDL 524 Leadership and the Dynamics of Organizational Change	**SEPS** **GR**
8.5	**Course Addition** EDL 523 Collaboration, Coaching, and Instructional Leadership Proposed prereq: Admission to the M.S. Educational Leadership or permission of the department chair	**SEPS** **GR**
8.6	**Course Addition** ED 591 Curriculum, Instruction, and Assessment 1 Note: should that be a "l" or an "I"	**SEPS** **GR**
8.7	**Course Addition** ED 592 Curriculum, Instruction, and Assessment II	**SEPS** **GR**
8.8	**Course Addition** EDT 540 Instructional Design & Technology for Educators Proposed prereq: Admission to the M.S. Educational Leadership or permission of the department chair	**SEPS** **GR**
8.9	**Course Addition** ED 515 Professional Ethics and Law for Teachers	**SEPS** **GR**
8.10	**Program Revision** MASTER OF SCIENCE IN EDUCATIONAL LEADERSHIP	**SEPS** **GR**

Engineering		
9.1	**Course Revision** CE 471 Reinforced Concrete Design CE 301 (C- or higher), ENGR 357 (C- or higher), and CE 397 (May be taken concurrently)	**SET**
9.2	**Course Revision** CE 497 CE Professional Practice and Senior Project Research CE 253 (C- or higher), CE 301 (C- or higher), CE 375 (C- or higher), CE 407 (May be taken concurrently), CE 451(C- or higher), CE 454 (May be taken concurrently), and CE Senior standing. First of a two course design sequence. Students work in teams in an environment appropriate to a professional engineering setting. Teams propose and begin development of a capstone design project. Class presentations include communication, engineering project management, the design function, ethics, professional liability and qualifications based selection. Oral and written communication skills are emphasized. One hour lecture and two hours laboratory per week.	**SET**
9.3	**Course Revision** ENGR 240 Spreadsheet and Engineering Problem Solving Tools Change title to "Computational Methods for Engineering" Prereqs: ENGR 150 (C- or higher); MATH 135 (may be taken concurrently) or MATH 152 (may be taken concurrently)	**AS** **SET**
9.4	**Course Addition** CE 222 CAD Applications in Civil Engineering	**SET**
9.5	**Course Addition** CE 301 CE Fundamental Computations PENDING A&S Signatures ENGR 240, ENGR 251, ME 258, MATH 221, CHEM 161, PHYS 125, CE 253 (May be taken concurrently), and ENGR 357 (May be taken	**AS** **SET**

	concurrently).	
9.6	**Course Revision** CE 397 Structural Analysis Change title to: Structural Analysis I MATH 221 (C- or higher), ENGR 357 (C- or higher) and CE 301 (May be taken concurrently). Analysis of statically determinate structures; moving loads and influence lines for determinate structures; deflection analysis of trusses, beams and frames; evaluation of cables and arches; application of dead, live, wind, and earthquake loads and load combinations for design of structures.	**SET**
9.7	**Course Addition** CE 402 Inquiry and Research in Civil Engineering	**SET**
9.8	**Course Addition** CE 407 Structural Analysis II MATH 226 (C- or higher), CE 301 (C- or higher), and CE 397 (C- or higher).	**AS** **SET**
9.10	**Course Revision** CE 451 Soil Mechanics & Foundations Change title to: Soil Mechanics Change credits from 4 to 3 ENGR 357 (C- or higher), and CE 301 (May be taken concurrently). Fundamentals of the physical and mechanical properties of soils. Application of solid mechanics and fluid mechanics to describe strength, permeability and consolidation. Evaluation of earth slope stability. Laboratory measurement of soil properties. Two hours lecture and three hours laboratory per week.	**SET**
9.11	**Course Addition** CE 452 Foundation Engineering	**SET**

9.12	**Course Revision** CE 454 Introduction to Transportation Engineering MATH 221 (C- or higher), MATH 226 (May be taken concurrently) and CE 253 (May be taken concurrently). Engineering for the planning, design, construction and maintenance of surface transportation projects. Driver and vehicle characteristics, highway geometric design, intersection design and control, traffic flow and capacity, safety, and travel forecast modeling. Three hours of lecture and one hour lab per week. Cycling: Fall	**AS** **SET**
9.13	**Course Revision** CE 458 GPS Mapping for GIS Change title to: Introduction to GPS for Engineering CE 253 or GEOG 378 or permission of instructor An exploration of Geodesy and world coordinate systems, GPS signals, GPS global framework, code and carrier wave based GPS equipment, GPS errors, and field operations for GIS mapping and cm level positioning. Hands on field use of GPS equipment and lab processing of GPS data into GIS software. Two hours lecture and two hours lab per week. Cycling: Spring	**SET**
9.14	**Course Revision** ME 485 Introduction to Combustion Change title to: Combustion	**SET**
9.15	**Course Addition** ME 487 Flight Dynamics	**SET**
9.16	**Course Addition** ME 488 Aerospace Vehicle Design	**SET**
9.17	**Program Revision** Civil Engineering General Education Requirements (40-49 credits) Study Area I: Arts & Humanities Literature	**SET**

		Philosophy or fine arts	3
		Literature, philosophy or fine arts	3
	Study Area II: Social Sciences		
		History	3
		Economics	3
	or		
	ET 399	Engineering Economy	3
	Study Area III: Behavioral Sciences		
		Anthropology, Psychology, or Sociology	3
	Study Area IV: Natural Sciences		
	PHYS 125	University Physics I	4
	PHYS 126	University Physics II	4
	Skill Area I: Communication Skills		
	ENG 110*	Freshman Composition	3
	ENGR 290	Engineering Technical Writing and Presentation	3
	Skill Area II: Mathematics		
	MATH 152*	Calculus I	4
	MATH 221	Calculus II	4
	Skill Area III: Foreign Language Proficiency		0-6
	Skill Area IV: University Requirement		2-3
	PE 144	Fitness/Wellness Ventures	
	or for transfer students		
	ENGR 150	Introduction to Engineering	

* A placement exam may be required before enrolling in English or Mathematics courses.

Major Requirements (53 credits, 50 for tranfer students taking ENGR 150 as Skill Area IV)

ENGR 150	Introduction to Engineering	3
ENGR 251	Engineering Mechanics I - Statics	3
ENGR 252	Engineering Mechanics II - Dynamics	3
ENGR 257	Mechanics of Materials	3
ME 258	Engineering Thermodynamics	3
ME 354	Fluid Mechanics	3
CE 253	Intro to Engineering Surveying	3
CE 301	**CE Fundamental Computations**	**1**
CE 357	Advanced Surveying	3
or		

	CE 458	**Intro GPS for Engr.**	3
	CE 357	Hydraulic Engineering	3
	CE 397	Stuctured Analysis	3
	CE 407	**Structural Analysis II**	**3**
	CE 451	Soil Mechanics ~~**& Foundations**~~ /w Lab.	**3**
	CE 452	**Foundation Engineering**	**2**
	CE 454	Intro. to transportation Engineering	3
	CE 470	Structural Steel Design	3
	CE 471	Reinforced Concrete Structures	3
	CE 475	Hydrology and Storm Drainage	3
	CE 476	Environmental Engineering	3
	CE 497	Prof. Practice & Sr. Project Research	4
	CE498	Senior Design Project - Capstone**	2
	** Completion of CE 498 requires that students register to take the NCEES Fundamentals of Engineering (FE) Exam.		
	Additional Requirements (34 or 35 credits)		
	~~**CET 236**~~	~~**Circuit Analysis**~~	~~**3**~~
	CHEM 161	General Chemistry I	3
	CHEM 162	General Chemistry I Laboratory	1
	ETM 356 or	Materials Analysis or	3
	CM 356	Materials of Constuction	4
	ENGR 240	Spreadsheet & Engr. Prob. Solving Tools	3
	~~**ETC 122**~~	~~**Intro. to CAD for AEC 1**~~	~~**3**~~
	CE 222	**CAD App in CE (or ETC 122)**	**2**
	MATH 226	Linear Algebra and Probability for Engineers	4
	MATH 355	Introduction to Differential Equations with Applications	4
	BIO or BMS or	Additional Science Elective w/ Lab.	4
	ESCI	BIO 121 or BMS 102/103 or ESCI 121 **&125)**	
		~~Directed Technical Elective~~	~~3~~
		CE Directed Technical Elective	6
	(Recommended: CE 472, CE 458, ENGR 490 or MATH 222)		
9.18	**Program Addition** Aerospace Engineering Minor 18 Credits ME 480 Aerospace Propulsion 3 Me 483 Aerodynamics 3		**SET**

	ME 486 Aerospace Structures and Materials 3 ME 485 Combustion 3 ME 487 Flight Dynamics 3 ME 488 Aerospace Vehicle Design 3	
History		
10.1	**Course Addition** HIST 298 History and Travel	**AS** **GE**
10.2	**Course Revision** HIST 501 The Professional Historian	**AS** **GR**
10.3	**Course Revision** HIST 540 Seminar in European History Prerequisite or corequisite: History 501 or 502. If the student has not taken History 501 or 502, please see department chair or M.A coordinator for permission to enroll.	**AS** **GR**
10.4	**Course Revision** HIST 545 History of South Africa since 1900 Prerequisite or corequisite: History 501 or 502. If the student has not taken History 501 or 502, please see department chair or M.A .coordinator for permission to enroll.	**AS** **GR**
10.5	**Course Revision** HIST 560 Seminar in American History Prerequisite or corequisite: History 501 or 502. If the student has not taken History 501 or 502, please see department chair or M.A coordinator for permission to enroll.	**AS** **GR**
10.6	**Course Revision** HIST 563 The Age of Jackson Prerequisite or corequisite: History 501 or 502. If the student has not taken History 501 or 502, please see department chair or M.A coordinator for permission to enroll.	**AS** **GR**

10.7	**Course Revision** HIST 565 Seminar in 17th- and 18th-Century America Prerequisite or corequisite: History 501 or 502. If the student has not taken History 501 or 502, please see department chair or M.A. coordinator for permission to enroll.	**AS** **GR**
10.8	**Course Revision** HIST 566 Civil War and Reconstruction in the United States Prerequisite or corequisite: History 501 or 502. If the student has not taken History 501 or 502, please see department chair or M.A .coordinator for permission to enroll.	**AS** **GR**
10.9	**Course Revision** HIST 571 History of Sex, Gender, and Health in Modern Prerequisite or corequisite: History 501 or 502. If the student has not taken History 501 or 502, please see department chair or M.A .coordinator for permission to enroll.	**AS** **GR**
10.10	**Course Revision** HIST 580 Seminar in Non-Western History Prerequisite or corequisite: History 501 or 502. If the student has not taken History 501 or 502, please see department chair or M.A .coordinator for permission to enroll.	**AS** **GR**
10.11	**Course Revision** HIST 583 Seminar in Latin American History Prerequisite or corequisite: History 501 or 502. If the student has not taken History 501 or 502, please see department chair or M.A .coordinator for permission to enroll.	**AS** **GR**
10.12	**Course Revision** HIST 585 Modern World History Prerequisite or corequisite: History 501 or 502. If the student has not taken History 501 or 502, please see department chair or M.A .coordinator for permission to enroll.	**AS** **GR**
10.11	**Program Revision** MASTER OF ARTS IN PUBLIC HISTORY	**AS** **GR**

Manufacturing and Construction Management		
11.1	**Course Revision** CM 500 Fundamentals of Construction Management Introduces fundamental aspects of construction management to students without formal construction management backgrounds. Emphasis on creating familiarity with all aspects of construction projects. Topics covered include planning, scheduling, estimating, organizational forms, contracts and risk management. No credit for students admitted to the MS CM program.	**SET** **GR**
11.2	**Course Deletion** EMEC 114 Introduction to Energy Processing	**SET**
11.3	**Course Revision** MFG 118 Introduction to Materials Technical principles and concepts of material structure, properties, and testing methods for the major material families (metals, polymers, ceramics and composites) as it relates to material selection and processing decisions.	**SET**
11.4	**Program Revision** Major in Construction Management BS (75 credits), not 78 Replace COMM 140 by ENGR 290 Change CM 255 to CM 475 Change ETC 405 to CM 425 Remove ENG 430 Remove PHIL 240 from study area I Add “or ESCI 121/125” to Study Area IV	**AS** **SET**
11.5	**Program Revision** Major in Industrial Technology, BS (63 credits)	**SET**

Modern Language		
12.1	**Program Revision** Minor in Modern Language SPAN 125 Intermediate Spanish I 3 SPAN 126 Intermediate Spanish II 3 or Span 128 Intensive Intermediate Spanish 6	**AS**
Music		
12.2	**Program Revision** Major in Music Education, B.S. (Certifiable for PK 12 teaching)	**AS** **SEPS**
Physical Ed and Human Performance		
13.1	**Course Addition** PE 223 Skills and Instructional Strategies for Cross-Curricular Teaching	**SEPS**
13.2	**Course Revision** PE 144 Fitness/Wellness Ventures	**SEPS** **GE**
13.3	**Program Revision** Major in Physical Education, B.S. Ed	**SEPS** **GE**
Physics and Earth Sciences		
14.1	**Course Revision** SCI 416 Educational Technology in Secondary Science Removal of SCI 416 from the Teacher Preparation program for science majors Irregular Cycling	**SEPS** **AS**
14.2	**Course Revision** SCI 417 Teaching of Science in the Secondary School	**SEPS**

	Increase the number credits from 3 to 4 Reduce the cycling of SCI 417 from every semester to every other semester (FALL) Remove co-req of SCI 416	**AS**
14.3	**Course Revision** SCI 419 Student Teaching Seminar Change Cycling for SCI 419 from every semester to the spring semester	**SEPS** **AS**
14.4	**Course Revision** SCI 420 History and Nature of Science Change prereqs to: 60 credits or six science courses or permission by instructor Increase cycling from every other fall to every spring Delete Grad credit	**SEPS** **AS** **GR**
14.5	**Course Revision** SCI 500 Science, Technology, and Society Change title to: STEM in Society Inquiry into the nature and values of current science, technology, engineering, and math (STEM) issues and their implications for society.	**AS** **GR**
14.6	**Program Revision** Major in Earth Sciences, B.S. (Certifiable for secondary teaching) 1) Delete SCI 416 (1 credit) 2) Change SCI 417 from 3 to 4 credits 3) Correct title of 161/162 4) Delete CHEM 163/164 5) Add CHEM 260 and 201. 6) NOTE: THE EARTH SCIENCE COURSES REFLECT APPROVED CHANGES IN FALL 2012	**SEPS** **AS**
14.7	**Program Revision** Minor in Astrobiology The changes are in the chemistry requirements (to reflect changes to the Chemistry department curriculum) and to the titles of BIO III and Chemistry courses. CHEM 161/162/201 are required of all science majors. The choice	**AS**

	between CHEM 200 and 260 takes into account the various requirements of the different science major programs.	
14.8	**Program Revision** Minor in General Science (Certifiable for secondary teaching) Correct title of 161/162 2) Delete CHEM 163/164 3) Add CHEM 260 and 201.	**SEPS** **AS**
14.9	**Program Revision** Minor in Physics (Certifiable for secondary teaching) 1) Correct title of 161/162 2) Delete CHEM 163/164 3) Add CHEM 260 and 201.	**SEPS** **AS**
14.10	**Program Revision** Major in Physics, B.S. (Certifiable for secondary teaching) 1) Delete SCI 416 (1 credit) 2) Change SCI 417 from 3 to 4 credits 3) Correct title of 161/162 4) Delete CHEM 163/164 5) Add CHEM 260 and 201. 6) Add SCI 420	**SEPS** **AS**
Special Education		
15.1	**Course Revision** SPED 511 Behavioral/Emotional Disorders SPED 315 or 501, admission to the School of Graduate Studies and admission to the Special Education program; or permission of the chair	**SEPS** **GR**
15.2	**Course Revision** SPED 512 Learning Disabilities Reduce credits from 3 to 2	**SEPS** **GR**
15.3	**Course Revision** SPED 513 Developmental Disabilities Reduce credits from 3 to 2 Examination of developmental disabilities including students with intellectual disabilities, pervasive developmental disorder, cerebral palsy, and other physical disabilities, with emphasis on current issues, classroom	**SEPS** **GR**

	practices, and contemporary research (10 hours of off-campus field experience required).	
15.4	**Course Revision** SPED 517 Instructional Methods for Students with Special Change title to: Special Education Methods in Teaching Reading (K-12) RDG 503 or equivalent, SPED 515, 516; Coreq 518 Methods in planning and implementing evidence-based reading instruction in K -12 settings for students with special needs (10 hours of off-campus field experience required).	**SEPS** **GR**
15.5	**Course Revision** SPED 518 Instructional Methods for Students with Special Change title to: Special Education Methods in Teaching Writing (K - 12) RDG 503, SPED 515, 516; Coreq 517 Methods in planning and implementing evidence-based writing instruction in K -12 settings for students with special needs (10 hours of off-campus field experience required).	**SEPS** **GR**
15.6	**Course Revision** SPED 519 Action Research in Special Education (Plan C) Reduce credits from 3 to 2 Change title to: Special Education Methods in Content Area Instruction (K-12) RDG 503 or equivalent, SPED 515, SPED 516, SPED 517, and SPED 518. May be taken concurrently with SPED 517 and SPED 518. Methods in planning and implementing evidence-based content area instruction in K -12 settings for students with special needs (10 hours of off-campus field experience required).	**SEPS** **GR**

Teacher Education and Special Education		
16.1	**Course Addition** EDEC 301 Child Development and Implications for Teaching and Learning in the Early Childhood Classroom	**SEPS**
16.2	**Course Addition** EDEC 302 Literacy for Early Childhood	**SEPS**
16.3	**Course Addition** EDEC 303 Arts and Aesthetics in Early Childhood Education	**SEPS**
16.4	**Course Addition** EDEC 321 Curriculum and Instruction for English Language Learners	**SEPS**
16.5	**Course Addition** EDEC 401 Integrated Methods for Early Childhood: Teaching and Learning of Mathematics and Science	**SEPS**
16.6	**Course Addition** EDEC 426 Integrated Curriculum for Early Childhood Change number and title to EDEC 402 Child Development and Implications for Teaching in the Primary Classroom Prereqs: Admission to the Professional Program In Early Childhood Education Exploration of developmentally appropriate integrated models of curriculum, instruction and assessment strategies in alignment with appropriate standards to meet the needs of a diverse learning community serving children 6 – 8 years of age. Reflection on practice in the place-based setting is required.	**SEPS**
16.7	**Course Revision** EDEC 430 Early Childhood Student Teaching 9 credits Prereqs: Admission to professional Program in early Childhood Student teachers in elementary schools work with teachers and children in professional activities. They take on interesting obligations for planning, implementing, assessing and reflecting on units of instruction for a diverse population. They are also expected to demonstrate effective leadership skills. Full semester of supervised field-based work is required. Only the required concurrent	**SEPS**

	courses may be taken during student teaching. CT law requires fingerprinting and a criminal background check for the field experiences in this class. Fingerprinting must be completed prior to the beginning of Student Teaching.	
16.8	**Course Addition** EDEC 431 Early Childhood Student Teaching Seminar	**SEPS**
16.9	**Course Addition** EDT 301 Instructional Technology in the Classroom I	**SEPS**
16.10	**Course Addition** EDT 321 Instructional Technology in the Classroom II	**SEPS**
16.11	**Course Addition** EDT 401 Instructional Technology in the Classroom III	**SEPS**
16.12	**Course Addition** EDT 421 Instructional Technology in the Classroom IV	**SEPS**
16.13	**Course Addition** SPED 301 Assessment, Instruction & Curriculum Adaptations for Early Childhood	**SEPS**
16.14	**Course Addition** SPED 321 Establishing the Classroom Environment for Early Childhood Programs	**SEPS**
16.15	**Program Revision** B.S.E.D. EARLY CHILDHOOD EDUCATION	**SEPS** **AS**
Tech & Engineering Education		
17.1	**Course Revision** TE 215 Materials Processing Concepts involved in the efficient processing of multiple materials. Appropriate hand tools and equipment are employed to demonstrate the relationship between materials, properties and processes. Attention is given to procedures common to a variety of manufactured products. Two hours lecture and two hours laboratory, course meets four hours per week.	**SET**
17.2	**Course Revision** TE 217 Laboratory Practices	**SET**

	Change credit from 3 to 4 credits TE 115 Laboratory practices designed to promote Science, Technology Engineering, and Math (STEM) activities and projects. Three hour Lecture/Two hour Lab, course meets five hours per week.	
17.3	**Course Addition** TE 218 Electrical Applications for STEM Study of electrical phenomena including energy conversion, transmission, and control applied to problem-based STEM learning experiences. Two hours lecture and two hours laboratory, course meets four hours per week.	**SET** **GE**
17.4	**Course Revision** TE 221 Innovation & Invention Change credit from 3 to 4 credits No Prereqs? Focus on activities that lead to innovation and invention, problem identification, research methods, prototype development and presentation of results. Three hours lecture and two hours laboratory, course meets five hours per week.	**SET**
17.5	**Course Revision** TE 245 Building Design & Construction Change credit from 3 to 4 credits No Prereqs? Means used to design and construct buildings. Investigation of building codes, site work, wood frame, masonry, concrete and steel frame design and construction techniques. A residential structure design project is required. Three hour Lecture/Two hour lab, course meets five hours per week.	**SET**
17.6	**Course Revision** TE 310 Communication Systems 3 credits Prereqs: TE 115 Application of graphic and electronic communication systems with focus on how the individualized components function together as a system. Research and lab activities include computer graphics, desktop publishing, video, and telecommunications. Two hours lecture and two hours laboratory, course	**SET**

	meets four hours per week.	
17.7	**Course Revision** TE 330 Transportation Design Change credit from 3 to 4 credits No Prereqs? Application of the systems which extend the means of transportation beyond the physical capability of the human body. Includes terrestrial, atmospheric, marine, and space transportation technologies and their social, environmental, and economic impact. Three hours lecture/Two hours laboratory, course meets five hours per week.	**SET**
17.9	**Course Revision** TE 417 Robot Design & Construction Change credit from 3 to 4 credits No Prereqs? Examines the use of robotics in education. Topics include robot applications in education, system development methodologies, project planning and scheduling, robot design and implementation, competitions, and educational resources. Three hours lecture/Two hours laboratory, course meets five hours per week.	**SET**
17.10	**Course Revision** TE 498 Technology & Engineering Education Senior Design Project TE 400, may be taken concurrently, and senior standing Team work or individual project of study, design and/or research a project related to technology education. Final reports submitted to the department for archiving. Oral presentations and electronic portfolio are required. Two hours lecture, two hours laboratory, course meets four hours per week.	**SET**
17.11	**Program Revision** Major in Technology and Engineering Education (K-12), BS (130 credits)	**SEPS** **SET**