

THE UNIVERSITY OF NEW MEXICO SENATE GRADUATE COMMITTEE

DATE: November 17, 2006

TO: SGC Committee

FROM: SGC Curriculum Sub-Committee (Grant Meyer, Chair; Ann Cunliffe, Mary Ellen Hanson)

RE: Curriculum Forms – New Degree Proposals, Degree Program Changes and New Course Requests

College/School	Graduate Unit	Form	Course Title & Description/Justification/Reason	Action
Arts & Sciences/Engineering	Optical Science	C	Revision of the Master's degree. Reduce the required course hours from 18 to 15 (selecting courses that provide a more general topic overview) and increase the number of interdisciplinary, optics related electives to broaden the breath and knowledge of skills. The total number of hours required for the degree remains the same.	APPROVE
Engineering	School of Engineering	D	New graduate certificate in Systems Engineering. Systems engineering is an emerging discipline within engineering that focuses on the analyss and synthesis of complex systems that arise in many engineering problems. This certificate will be offered within the context of existing SOE MS and PhD programs, or can be earned as a stand-alone certificate.	APPROVE
Engineering	School of Engineering	B	Engr 501: Systems Engineering Management (3). An overview of the systems engineering management process. Topics include technical planning, cost estimating and budgeting, risk management, project control, trade-off analysis and decision-making. Required for Systems Engineering certificate (Form D), not offered as topics previously.	APPROVE pending receipt of syllabus and minor correction on Form B
Engineering	School of Engineering	B	Engr 502: Systems Engineering Design (3). A broad introduction to systems engineering and the structured approach necessary for the design of complex systems. The formulation of systems problems and the approach tot heir solution is emphasized. Topics include mathematical techniques for systems engineering, requirements for design process, and decision analysis tools. Required for Systems Engineering certificate (Form D), not offered as topics previously	APPROVE pending receipt of syllabus and minor correction on Form B

Engineering	School of Engineering	B	Engr 503: Systems Architecture (3). The foundation for developing and evaluating architecture for systems. The process for generating functional, physical, and operational architecture from a top level operations concept. Topics include: structural analysis, object oriented approaches, generation of executable architecture models. Required for Systems Engineering certificate (Form D), not offered as topics previously	APPROVE pending receipt of syllabus and minor correction on Form B
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