FLORIDA INTERNATIONAL UNIVERSITY
NEW UNDERGRADUATE PROGRAM PROPOSALS

*Proposal for a **New** Undergraduate Degree Program, Track, Minor or Academic Undergraduate Certificate*

INSTRUCTIONS: Please Type. Fill out this form **completely.**

School/College Engineering and Computing Div./Dept. Mechanical and Materials Eng.

CHANGE: PROGRAM (☐ B.A. ☐ B.S. ☐ Other Bachelor's _____ ☐ TRACK
☑ ACADEMIC UNDERGRADUATE CERTIFICATE)

Title: Professional Certificate in Materials Engineering

Proposed Implementation Date: Spring 2007

CHANGE REQUESTED BY:

Faculty Contact	Kinzy Jones (Type Name)	(Signature)	/ /20
Chair (Dept./Div.)	George Dulikravich (Type Name)	(Signature)	/ /20
Chair (Curr. Comm.)	Sabri Tosunoglu (Type Name)	(Signature)	/ /20
College/School Dean	Vish Prasad (Type Name)	(Signature)	/ /20

APPROVED BY:

Undergrad Council Chair	(Type Name)	(Signature)	/ /20
University Curr. Comm.	(Type Name)	(Signature)	/ /20
Faculty Senate Chair	(Type Name)	(Signature)	/ /20
Provost	(Type Name)	(Signature)	/ /20

Professional Certificate in Materials Engineering

Kinzy Jones, Professor and Coordinator

The Professional Certificate Program in Materials Engineering provides both traditional students and practicing professionals with learning experiences that enhance their design capabilities in the area of Materials Engineering.

This certificate program focuses on both basic engineering science and practical applications of system design. Interested applicants must contact the department chairperson or the coordinator of the certificate program prior to registering for the program.

The certificate will be awarded to students who successfully pass the listed group of five courses with a minimum grade of C or better:

EGN 3365 Materials in Engineering (3)
EGM 4521C Material Science I (3)
EGM 4522C Materials Science II (3)
EMA 5015 Introduction to Nanomaterials Engineering (3)
EML 4XXX Undergraduate Research Experience (3)

*EML 4XXX Undergraduate Research Experience has already been printed in University Curriculum Bulletin Number 4 dated February 28, 2006.

Some of these courses listed above may require additional prerequisites or permission of the program coordinator.

Rationale:

This new undergraduate professional certificate program is being proposed as requested by our undergraduate students in the Department of Mechanical and Materials Engineering. The program will also be available to local practicing engineers who would like to have some specialization in the materials field, which will improve their knowledge base, marketability, and the possibility of pursuing a graduate degree in this field.

Impact:

All of the above courses are regularly offered in the Department of Mechanical and Materials Engineering. Impact of the new certificate program on the department is expected to be minimal since each course will have a few extra students.

Current enrollment rate for the existing Professional Certificate Program in Heating, Ventilating and Air Conditioning Design offered in the Department of Mechanical and Materials Engineering is about five students per year for the last five years. Hence, this new certificate program is expected to generate approximately the same level of registration.

No extra funding is requested to implement this undergraduate certificate program.