

SOUTHEAST FLORIDA ENGINEERING EDUCATION CONSORTIUM

Statement of Intent

Representatives from six community colleges and universities have established the Southeast Florida Engineering Education Consortium with the intent to enhance the quality of engineering instruction, strengthen the links between community college and university study in the field and provide a mechanism to increase the number of students majoring in engineering.

By establishing common prerequisites to enter upper division engineering programs, educators believe that student interests will be better served and the institutions can best meet accreditation requirements set forth in the ABET 2000 criteria. These standards will enable community college students to complete an undergraduate degree in engineering in the same time frame as students who begin their college education in a four-year program and make it easier for them to change majors, without a significant loss of credit toward their degrees. This process includes developing an introductory course in engineering that would be available to freshmen, in order to reduce attrition of transfer students at the upper division level and increasing communication of current program information with advisors at the lower division.

The consortium has recommended developing a time frame to implement its plans and forming a standing committee with members from the six participating institutions in order to address the changing needs of undergraduate engineering students. The consortium is also examining the feasibility of a Southeast Florida Engineering Advisory Board, made up of industry and community leaders, to work with the consortium in developing programs to address the needs of the local economy. The specific objectives the consortium intends to pursue are as follows:

- To develop and incorporate an introduction to engineering course into the freshman curriculum for engineering students, making sure that this course will not increase the total number of credits required for graduation.
- To recommend this course as part of the Associate of Arts program at consortium member institutions and provide appropriate control over course content and management to meet accreditation requirements
- To reach an agreement on the common courses for the first two years of engineering study, consistent with state standards, so students may change majors with minimal loss of credit toward their degrees and guaranteeing by following State of Florida common prerequisites for engineering, they will be accepted to upper division standing in the major program.
- To ensure that all well-qualified students who enter a community college can complete their baccalaureate programs with the same number of courses required of students beginning at a four-year institution.
- To communicate current program information from four-year institutions to academic advisors, and to create opportunities for lower division students to communicate with advisors at four-year institutions.
- To create and maintain a Web page that describes all articulation requirements established by state guidelines and by the consortium.
- To review this statement of intent and course program sheets on an annual basis to ensure they are kept in compliance with state and ABET requirements.

Participating Institutions:

Broward Community College
Florida Atlantic University
Florida International University
Indian River Community College
Miami-Dade Community College
Palm Beach Community College

Willis N. Holcombe, President
Anthony James Catanese, President
Modesto A. Maidique, President
Edwin R. Massey, President
Eduardo J. Padrón, College President
Dennis P. Gallon, President

For Broward Community College

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K-16 Liaison	Vice President, Academic Affairs	President

For Florida Atlantic University

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Dean, College of Engineering	Provost	President

For Florida International University

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Dean, College of Engineering	Provost and Executive Vice President	President

For Indian River Community College

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Vice President, Academic Affairs	President

For Miami-Dade Community College

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Director, School of Design Technology	College President

For Palm Beach Community College

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Vice President, Academic Affairs	President

APPROVED AS TO FORM
AND LEGALITY
General Counsel
Florida Atlantic University

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for security



FLORIDA ATLANTIC UNIVERSITY

THE LOWER 48

- ENC 1101 & 1102 6 cr
- Humanities 6 cr
- Social Science 6 cr
- Additional Hum/SS 3 cr
- Calculus 12 cr
- Engineering Physics 8 cr
- Chemistry (1041/1045) + Lab 4 cr
- Differential Equations 3 cr

College of Engineering

Proudly Serving South East Florida

FLORIDA ATLANTIC UNIVERSITY
Department of Computer Science and Engineering
Computer Engineering Curriculum for Miami Dade Community College Transfer Students
For Implementation Fall, 1998

Non-technical Lower Division Credits (24 credits)

Subject Area	Course	Cr	Institution
Eng Comp I	ENC 1101	3	MDCC
Eng Comp II	ENC 1102	3	MDCC
Humanities I	Group A	3	MDCC
Humanities II	Group B	3	MDCC
Soc Sci I	Group A	3	MDCC
Soc Sci II	Group B	3	MDCC
Civ & Eng I	EGS 2033	3	MDCC
Literature	LIT 2411	3	MDCC

Technical Lower Division Credits (36 credits)

Subject Area	Course	Cr	Institution
		4	MDCC
		4	MDCC
		4	MDCC
Diff Eq [1]	MAP 2302	3	MDCC
Eng Phys I	PHY 2048	3	MDCC
Phys I Lab	PHY 2048L	1	MDCC
		3	MDCC
		1	MDCC
"C" Prog [2]	COP 1220	3	MDCC
Chem I	CHM 1045	3	MDCC
Chem Lab	CHM 1045L	1	MDCC
Intro Eng [3]	EGS 1001	3	MDCC
Circuits I	EEL 2111	3	MDCC

Upper Division Program (68 credits)

Subject Area	Course	Cr	Institution
Found CS	COT 3002	3	FAU
Found CS Lab	COT 3002L	1	FAU
Data Struct	COP 3530	3	FAU
Prin Softw Eng	CEN 4010	3	FAU
Comp Op Sys	COP 4610	3	FAU
Stoch Mod CS	STA 4821	3	FAU
Sr Proj I	CDA 4914	1	FAU
Sr Proj II	CDA 4915	3	FAU
Senior Seminar	COT 4935	1	FAU
Discrete Math [4]	MAD 2104	3	FAU
Intro Logic Des [4]	CDA 3201	4	FAU
Intro Microcom	CDA 3331	4	FAU
Struc Comp Arc	CDA 4105*	3	FAU
Comp Des I	CDA 4150*	3	FAU
CAD Comp Des	CDA 4170*	3	FAU
Intro VLSI	CDA 4210**	3	FAU
Struc Dig Des	CDA 4420**	3	FAU
Int Data Comm	CEN 4500**	3	FAU
Electronics I	EEL 3300	4	FAU
EE Lab I	ELR 3308L	2	FAU
Dig Electronics	EEL 4340	3	FAU
Des for Manuf	EML 4930	3	FAU
Tech Electives		9	FAU

*take 2 of 3

**take 2 of 3

[1] EGM 2311 may be substituted for MAP 2302.

[2] EEL 2993 may be substituted for COP 1220.

[3] Should be taken first term of first year.

[4] May be taken at MDCC.

The 60 lower division credit hours listed above will count toward the AA degree and will all transfer into the Computer Engineering program at FAU. It should be noted that many Community College students have deficiencies in math, English or science which may count toward their AA degree. These courses will not transfer into the CpE program and will not count toward the bachelor's degree. Only those courses listed above or their equivalent will be transferred. The AA degree assures that the student has met the Gordon Rule requirements of the State University System. Students transferring without the AA degree may need to take additional courses to meet the Gordon Rule.

For Florida Atlantic University

Date

For Miami Dade Community College

Date

FLORIDA ATLANTIC UNIVERSITY
Department of Electrical Engineering
Electrical Engineering Curriculum for Miami Dade Community College Transfer Students
For Implementation Fall, 1998

Non-technical Lower Division Credits (24 credits)

Subject Area	Course	Cr	Institution
		3	MDCC
		3	MDCC
	A	3	MDCC
	B	3	MDCC
		3	MDCC
		3	MDCC
		3	MDCC
		3	MDCC

Technical Lower Division Credits (36 credits)

Subject Area	Course	Cr	Institution
Calculus I	MAC 2311	4	MDCC
		4	MDCC
		4	MDCC
Diff Eq [1]	MAP 2302	3	MDCC
Eng Phys I	PHY 2048	3	MDCC
Phys I Lab	PHY 2048L	1	MDCC
		3	MDCC
		1	MDCC
"C" Prog [2]	COP 1220	3	MDCC
Chem I	CHM 1045	3	MDCC
Chem Lab	CHM 1045L	1	MDCC
Intro Eng [3]	EGS 1001	3	MDCC
Networks I	EEL 2111	3	MDCC

Upper Division Program (68 credits)

Subject Area	Course	Cr	Institution
Networks II	EEL 3112	3	FAU
Intr Electronics	EEL 3300	4	FAU
Lin Sys Anal	EEL 4656	3	FAU
Fields & Waves	EEL 3471	4	FAU
Machines	EEL 4220	3	FAU
Electronics II	EEL 4361	3	FAU
Stoch Proc	EEL 4541	3	FAU
Comm Theory	EEL 4512	3	FAU
Contr Theory	EEL 4652	3	FAU
Comm or Contr Lab	EEL 4512L or EEL 4652L	1	FAU
Sr Proj I	EEL 4914	2	FAU
Sr Proj II	EEL 4915	3	FAU
Lab I	ELR 3308L	2	FAU
Lab II	ELR 4309L	2	FAU
Logic Design [4]	CDA 3201C	4	FAU
Intro uProc	CDA 3331C	4	FAU
EE Elective		3	FAU
EE Elective		3	FAU
EE Elective		3	FAU
Tech Elective		3	FAU
Eng Sci [4]		3	FAU
Eng Sci		3	FAU
Adv Math		3	FAU

- [1] EGM 2311 may be substituted for MAP 2302.
 [2] EEL 2993 may be substituted for COP 1220.
 [3] Should be taken first term of first year.
 [4] May be taken at MDCC. Consult with FAU advisor.

The 60 lower division credit hours listed above will count toward the AA degree and will all transfer into the Electrical Engineering program at FAU. It should be noted that many Community College students have deficiencies in math, English or science that may count toward their AA degree. These courses will not transfer into the EE program and will not count toward the bachelor's degree. Only those courses listed above or their equivalent will be transferred. The AA degree assures that the student has met the Gordon Rule requirements of the State University System. Students transferring without the AA degree may need to take additional courses to meet the Gordon Rule.

For Florida Atlantic University _____ Date _____ For Miami Dade Community College _____ Date _____

FLORIDA ATLANTIC UNIVERSITY
Department of Mechanical Engineering
Mechanical Engineering Curriculum for Miami Dade Community College Transfer Students
For Implementation Fall, 1998

Non-technical Lower Division Credits (24 credits)

Subject Area	Course	Cr	Institution
Eng Comp I	ENC 1101	3	MDCC
Eng Comp II	ENC 1102	3	MDCC
Humanities I	Group A	3	MDCC
Humanities II	Group B	3	MDCC
Soc Sci I	Group A	3	MDCC
Soc Sci II	Group B	3	MDCC
Civ & Eng I	EGS 2033	3	MDCC
Literature	LIT 2411	3	MDCC

Technical Lower Division Credits (36 credits)

Subject Area	Course	Cr	Institution
Calculus I	MAC 2311	4	MDCC
Calculus II	MAC 2312	4	MDCC
Calculus III	MAC 2313	4	MDCC
Diff Eq [1]	MAP 2302	3	MDCC
Eng Phys I	PHY 2048	3	MDCC
Phys I Lab	PHY 2048L	1	MDCC
Eng Phys II	PHY 2049	3	MDCC
Phys II Lab	PHY 2049L	1	MDCC
"C" Prog [2]	COP 2220	3	MDCC
Chem I	CHM 1045	3	MDCC
Chem Lab	CHM 1045L	1	MDCC
Intro Eng [3]	EGS 1001	3	MDCC
Engr Graphics	EGS 1111C	3	MDCC

Upper Division Program (68 credits)

Subject Area	Course	Cr	Institution
Statics	EGM 3510	3	FAU
Dynamics	EGM 3400	3	FAU
Stren Mat	EGM 3524	3	FAU
Eng Matls I	EGM 3521	3	FAU
Thermo I	EML 3100	3	FAU
Exp Method	EML 3523C	4	FAU
Fluid Mech	EML 3701	3	FAU
Systems Dyn	EML 4380	3	FAU
Heat Trans	EML 4142	3	FAU
App Trans Phen	EML 4127	3	FAU
Intro to CAD	EML 4535	3	FAU
Machine Des	EML 4500	3	FAU
Engr Design	EML 4521	3	FAU
Design Project	EML 4551	3	FAU
Laboratory	EML 43--C	2	FAU
Network Anal	EEL 3004	3	FAU
Analog Electr	EEL 3003	3	FAU
Tech Elective		3	FAU
Tech Elective		3	FAU
Tech Elective		3	FAU
Tech Elective		2	FAU
Comp Appl	EML 4534	3	FAU
Math Elective		3	FAU

- [1] EGM 2311 may be substituted for MAP 2302.
 [2] EEL 2993 may be substituted for COP 1220.
 [3] Should be taken first term of first year.

The 60 lower division credit hours listed above will count toward the AA degree and will all transfer into the Mechanical Engineering program at FAU. It should be noted that many Community College students have deficiencies in math, English or science which may count toward their AA degree. These courses will not transfer into the ME program and will not count toward the bachelor's degree. Only those courses listed above or their equivalent will be transferred. The AA degree assures that the student has met the Gordon Rule requirements of the State University System. Students transferring without the AA degree may need to take additional courses to meet the Gordon Rule.

For Florida Atlantic University

Date

For Miami Dade Community College

Date

FLORIDA ATLANTIC UNIVERSITY

Department of Ocean Engineering

**Ocean Engineering Curriculum for Miami Dade Community College Transfer Students
For Implementation Fall, 1998**

Non-technical Lower Division Credits (24 credits)

Subject Area	Course	Cr	Institution
Eng Comp I	ENC 1101	3	MDCC
Eng Comp II	ENC 1102	3	MDCC
Humanities I	Group A	3	MDCC
Humanities II	Group B	3	MDCC
Soc Sci I	Group A	3	MDCC
Soc Sci II	Group B	3	MDCC
Civ & Eng I	EGS 2033	3	MDCC
Literature	LIT 2411	3	MDCC

Technical Lower Division Credits (37 credits)

Subject Area	Course	Cr	Institution
Calculus I	MAC 2311	4	MDCC
Calculus II	MAC 2312	4	MDCC
Calculus III	MAC 2313	4	MDCC
Diff Eq [1]	MAP 2302	3	MDCC
Eng Phys I	PHY 2048	3	MDCC
Phys I Lab	PHY 2048L	1	MDCC
Eng Phys II	PHY 2049	3	MDCC
Phys II Lab	PHY 2049L	1	MDCC
"C" Prog [2]	COP 1220	3	MDCC
Chem I	CHM 1045	3	MDCC
Chem Lab	CHM 1045L	1	MDCC
Statics & Buoy	EOC 3105	4	FAU
Eng Graphics	EGS 1111C	3	FAU

Upper Division Program (75 credits)

Subject Area	Course	Cr	Institution
Oceanography	OCG 3002	3	FAU
		3	FAU
		3	FAU
	EOC 3113	-	
		-	
Vibrations	EOC 3114	3	FAU
Analog Electr	EEL 3003	3	FAU
Digital Electr	EEL 3341	3	FAU
Acoustics I	EOC 3306	3	FAU
Acoustics II	EOC 4115	3	FAU
Eng Mat I	EOC 3200	3	FAU
Eng Mat II	EOC 4240	-	
Fluid Mech I	EOC 4422	-	
Fluid Mech II	EOC 4124	3	FAU
Struct Anal I	EOC 4410	3	FAU
Struct Anal II	EOC 4412	3	FAU
Dynamic Syst	EOC 4620	3	FAU
O & E Data An	EOC 4631	3	FAU
Ocean Th Sys	EOC 4193	3	FAU
Oc Wave Mech	EOC 4422	-	
Real Time Sys	EOC 4610	-	
Oc Sys Des	EOC 4804	-	

- [1] EGM 2311 may be substituted for MAP 2302.
- [2] EEL 2993 may be substituted for COP 1220.

The 61 lower division credit hours listed above will count toward the AA degree. In addition, MAC 1102 and MAC 1114 are prerequisite to MAC 2311 and will count toward the AA degree, but will not count toward the BSOE degree. Certain deficiency courses in other areas will also count toward the AA degree, but will not count toward the BSOE degree. Only those courses listed above or their equivalent will be transferred. The AA degree assures that the student has met the Gordon Rule requirements of the State University System. Students transferring without the AA degree may have to take additional courses to meet the Gordon Rule.

For Florida Atlantic University

Date

For Miami Dade Community College

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SOUTHEAST FLORIDA ENGINEERING EDUCATION CONSORTIUM

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Dean, College of Engineering

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President

For Florida International University

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Provost and
Executive Vice President

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President

For Indian River Community College

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Vice President, Academic Affairs

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President

For Miami-Dade Community College

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Director,
School of Design Technology

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College President

For Palm Beach Community College

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Vice President, Academic Affairs

Signature obscured
for security

President

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AND LEGALITY
General Counsel
Florida Atlantic University

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for security
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MIAMI DADE COMMUNITY COLLEGE

Department of Engineering
Electrical Engineering FIU Transfer

Non-technical Lower Division Credits (24 credits)

Subject Area	Course	Credits
Eng Comp I	ENC 1101	3
Eng Comp II	ENC 1102	3
Humanities I	From Hum Group A	3
Humanities II	From Hum Group B	3
Soc Sci I	Soc Sci Group A	3
Soc Sci II	Soc Sci Group B	3
Civ & Eng I (Adv SS)	EGS 2033	3
Literature (Adv. Hum)	LIT 2411	3

Technical Lower Division Credits (36 Credits)

Subject Area	Course	Credits
Calculus I	MAC 2311	4
Calculus II		4
Calculus III		4
	MAP 2302/ EGM 2311	3
	PHY 2048	1
		3
		3
		3
"C" Prog/Applied Soft Tech for Eng	COP 1220/ EEL 2993	3
Circuits I	EEL 2111	3

Upper Division Program (71 Credits)

Subject Area	Course	Credits
Statics	EGN 3311/EGS 2311*	
	EGN 3321/EGS 2321*	
Controls	EEL 3657	
Logic Design	EEL 3712/2712*	
Logic Design Lab	EEL 3712L/2712L*	1
Power I	EEL 4213	3
Power I Lab	EEL 4213L	1
Electronics II	EEL 4304	3
		1
		3
		1
		3
Senior Design I	EEL 4010	2
Senior Design II	EEL 4011	2
EE Elective I		3
	EEL 3135	
		3
		3
	EGN 3365	3

Deficiency Courses

Subject	Course	Credits
Drawing	EGS 1111C or ETD 1330	3
Modern Languages		10

MIAMI DADE COMMUNITY COLLEGE

Department of Engineering
Computer Engineering FIU Transfer

Non-technical Lower Division Credits (24 credits)

Subject Area	Course	Credits
Eng Comp I	ENC 1101	3
Eng Comp II	ENC 1102	3
Humanities I	From Hum Group A	3
Humanities II	From Hum Group B	3
Soc Sci I	Soc Sci Group A	3
Soc Sci II	Soc Sci Group B	3
Civ & Eng I (Adv SS)	EGS 2033	3
Literature (Adv Hum)	LIT 2411	3

Upper Division Program (68 Credits)

Subject Area	Course	Cr.
Statics	EGN 3311/EGS 2311*	3
Dynamics	EGN 3321/EGS 2321*	3
Logic Design	EEL 3712/2712*	3
Logic Design Lab	EEL 3712L/2712L*	1

Technical Lower Division Credits (36 Credits)

Subject Area	Course	Credits
Calculus I	MAC 2311	4
Calculus II	MAC 2312	4
Discrete Math	MAD 2104	3
Diff Eq/Analysis Eng Systems	MAP 2302/ EGM 2311	3
Eng Phy I	PHY 2048	3
Phy I Lab	PHY 2048L	1
Eng Phy II	PHY 2049	3
Phy II Lab	PHY 2049L	1
Chemistry I	CHM 1045	3
Chm I Lab	CHM 1045L	1
Intro to Eng	EGS 1001	3
"C" Prog/Applied Soft Tech for Eng	COP 1220/ EEL 2993	3
Circuits I	EEL 2111+EEL 2111L	3+1

Deficiency Courses

Subject	Course	Credits
Drawing	EGS 1111C or ETD 1330	3
Modern Languages		10

* may be taken at MDCC

MIAMI DADE COMMUNITY COLLEGE

Department of Engineering
Mechanical Engineering FIU Transfer

Non-technical Lower Division Credits (24 credits)

Subject Area	Course	Credits
Eng Comp I	ENC 1101	3
Eng Comp II	ENC 1102	3
Humanities I	From Hum Group A	3
Humanities II	From Hum Group B	3
Soc Sci I	Soc Sci Group A	3
Soc Sci II	Soc Sci Group B	3
Civ & Eng I (Adv SS)	EGS 2033	3
Literature (Adv Hum)	LIT 2411	3

Technical Lower Division Credits (36 Credits)

Subject Area	Course	Credits
Calculus I	MAC 2311	4
Calculus II	MAC 2312	4
Calculus III	MAC 2313	4
Diff Eq/Analysis Eng	MAP 2302/ EGM 2311	3
Eng Phy I	PHY 2048	3
Phy I Lab	PHY 2048L	1
Eng Phy II	PHY 2049	3
Phy II Lab	PHY 2049L	1
Chemistry I	CHM 1045	3
Chm I Lab	CHM 1045L	1
Intro to Eng	EGS 1001	3
Eng Graphics/ Auto CAD	EGS 1111C/ ETD 1330	3
Circuits I	EEL 2111	3

Upper Division Program (68 Credits)

Subject Area	Course	Cr.
Statics	EGN 3311/EGS 2311*	3
Dynamics	EGN 3321/EGS 2321*	3
Circuits I Lab	EEL 3111L/2111L*	3

Deficiency Courses

Subject	Course	Credits
Modern Languages		10

* May be taken at MDCC