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.

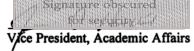
Participating Institutions:

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

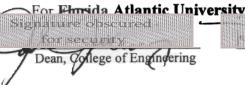
Willis N. Holcombe, President Anthony James Catanese, President Modesto A. Maidique, President Edwin R. Massey, President Eduardo J. Padrón, College President Dennis P. Gallon, President

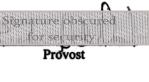


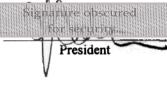








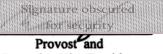




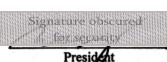
For Florida International University



Dean, College of Engineering



Executive Vice President



For Indian River Community College



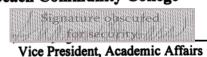


For Miami-Dade Community College



College President

For Palm Beach Community College





APPROVED AS TO FORM AND LEGALITY General Counsel Florida Atlantic University

for security

THE LOWER 48

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

6 cr

6 cr

6 cr

3 cr

12 cr

8 cr

4 cr

College of Engineering

Proudly Serving South East Florida

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)

1 CUMBCAL LOW	DIVISION CICUL	100 1	7. 4.0.107
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
<u> </u>		3	MDCC
, <u> </u>		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

Unner Division Program (68 credits)

Opper Division Fro	grain (oo creuits		
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

- [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

^{**}take 2 of 3

Department of Electrical Engineering

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

Non-technical Lower	Division Credit	s (24 credits)
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Subject Area	Course	Cr	Institution
Dudjettine		3	MDCC
		3	MDCC
	A	3	MDCC
	В	3	MDCC
		3	MDCC
		3	MDCC
	-	3	MDCC
		3	MDCC

Technical Lower Division Credits (36 credits)

Technical Lower Division Credits (30 credits)			
Subject Area	Course	Cr	Institution
Calculus I	MAC 2311	4	MDCC
Calculus		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
Tily3 I Luc		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
METMOTER	1		

Upper Division Pa	rogram (68 credit		
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	EEL 4512L or	1	FAU
Lab	EEL 4652L		
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	1	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

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)

Course	Cr	Institution
ENC 1101	3	MDCC
ENC 1102	3	MDCC
Group A	3	MDCC
Group B	3	MDCC
Group A	3	MDCC
Group B	3	MDCC
EGS 2033	3	MDCC
LIT 2411	3	MDCC
	ENC 1101 ENC 1102 Group A Group B Group A Group B EGS 2033	ENC 1101 3 ENC 1102 3 Group A 3 Group B 3 Group A 3 Group B 3 Group B 3 EGS 2033 3

Technical Lower Division Credits (36 credits)

Technical Lower	Technical Lower Division Credits (30 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 Progr	ram (68 credits)
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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 43C	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

Department of Ocean Engineering

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

ľ	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)

n

Upper Division Program (75 credits)

Subject Area	Course	Cr	Institution
Oceanography	OCG 3002	3	FAU
			_
		3	FAU
		33	FAU
	EOC 3113	1 -	
		1-	
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	1 -	
Fluid Mech I	EOC 4422		
Fluid Mech II	EOC 4124	3	FAU
Struct Anal I	EOC 4410	5	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	Date

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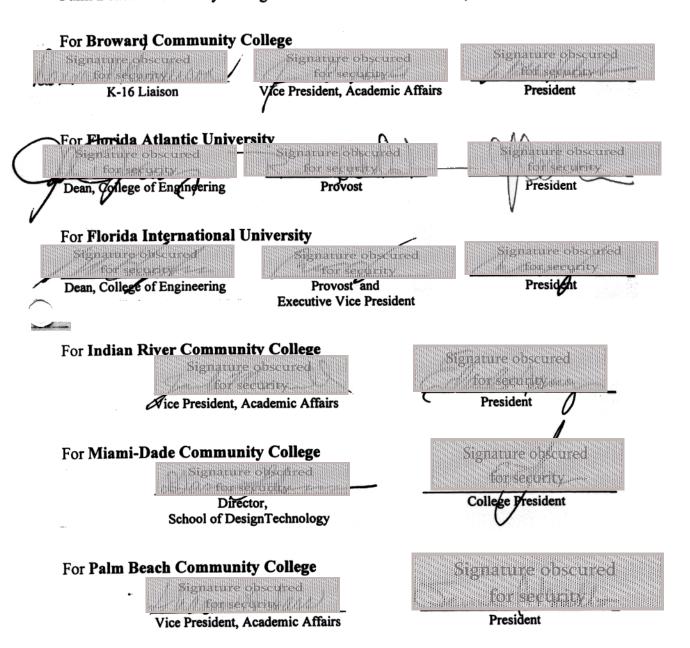
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- To recommend this course as part of the Associate of Arts program at consortium member institutions and provide appropriate control over course content and management to meet accreditation requirements
- To reach an agreement on the common courses 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.
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- 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



APPROVED AS TO FORM
AND LEGALITY
General Counsel
Florida Atlantic University

Department of Engineering Electrical Engineering FIU Transfer

Subject Area	Course	Credits	Subject Area	Course	Credits
			Statics	EGN 3311/EGS 2311*	
Eng Comp I	ENC 1101	3		EGN 3321/EGS 2321*.	
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		1	
Civ & Eng I (Adv SS)	EGS 2033	3			
Literature (Adv. Hum)	LIT 2411	3	Controls	EEL 3657	
			Logic Design	EEL 3712/2712*	1
			Logic Design Lab	EEL 3712L/2712L*	1
Technical Lower D	ivision Credits (36 C	redits)	Power I	EEL 4213	3
Subject Area	Course	Credits	Power I Lab	EEL 4213L	1
Calculus I	MAC 2311	4	Electronics II	EEL 4304	3
Calculus II	l	4	_		1
Calculus III	1.	4	_		3
5	MAP 2302/				1
7	EGM 2311	. 3			3
	PHY 2048				1
· · · · · · · · · · · · · · · · · · ·	F 3.2.	1			3
· '7	P. Santagara	3	Senior Design I	EEL 4010	2
			Senior Design II	EEL 4011	2
	[EE Elective I		3
	Г-				
	[[ε,		EEL 3135	
"C" Prog/Applied Soft	COP 1220/				
Tech for Eng	EEL 2993	ε,	-		1
Circuits I	EEL 2111	-			1
				EGN 3365	1 3

Deficiency Courses

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

Department of Engineering Computer Engineering FIU Transfer

Credits

3+1

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) Course

O a b	1000.00	
Calculus I	MAC 2311	4
Calculus II	MAC 2312	4
Discrete Math	MAD 2104	3
Diff Eq/Analysis Eng	MAP 2302/	
€ ms	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

COP 1220/

EEL 2993

EEL 2111+EEL 2111L

Upper Division Program (68 Credits)

Oppor Division		1.57
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
		T

Deficiency Courses

"C" Prog/Applied Soft

Tech for Eng

Circuits I

Subject Area

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

Department of Engineering Civil 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
Tech Writing	ENC 2301/ENC 1210	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/	
Sms	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	COP 1220/	
Tech for Eng	EEL 2993	3
Circuits I	EEL 2111	3

Upper Division Program (68 Credits)

Upper Division Program (68 Credits)		
Subject Area	Course	Credits
Statics	EGN 3311/EGS 2311*	3
Circuits I Lab	EEL 3111L/2111L*	3
Dynamics	EGN 3321/EGS 2321*	3
Marie Colombia (M. Albert Labora)		

Deficiency Courses

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

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)

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/	
sms ?	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/	EGS 1111C/	
Auto CAD	ETD 1330	3
Circuits I	EEL 2111	3

Upper Division Program (68 Credits)

Opper Division Program (68 Credits)		
Subject Area	Course	Cr.
Statics	EGN 3311/EGS 2311*	3
Dynamics	EGN 3321/EGS 2321*	,
Circuits I Lab	EEL 3111L/2111L*	
	7	
V 52		6)
		200
7.		

Deficiency Courses

Subject	Course	Credits
Modern Languages		10

* May be taken at MDCC

10/19/98