CURRICULUM PACKAGE FROM THE SENATE CURRICULUM COMMITTEE

FOR THE SCHOOLS OF

BUSINESS

ENGINEERING

SCIENCE & MATHEMATICS

<u>Please note:</u> Copies of Catalog Proposals are available for study in the Deans' Offices. Questions regarding curriculum may be directed to the school representatives listed below:

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Agriculture
Architecture & Environmental Design
Business
Communicative Arts & Humanities
Engineering
Professional Studies & Education

Science & Mathematics

* Curriculum Committee Chair

APPROVED May 21, 1985

RECOMMENDATIONS FROM THE ACADEMIC SENATE CURRICULUM COMMITTEE FOR PROPOSED CURRICULAR CHANGES FOR THE 1986 - 1988 CATALOG FROM

THE SCHOOL OF BUSINESS

D=0	title U=units C/S=course staffing description N=number PR=prerequisite prefix M=mode #=page of dept.propo	DA=d	oproved isapprove o recommo	ed endation
Acc	counting Department	Type of Change	#	Comm. Action
1.	ACTG 204 Income Tax for the Non-Accountant (2)	New		Α
2.	ACTG 301 Managerial Accounting (4)	PR		A
3.	ACTG 404 Taxation of Partnerships, Estates and Trusts and Complex Capital Transactions (4)	D,T		А
4.	ACTG 405 Corporate Tax Accounting & Tax Administration (4)	New		А
Bus	siness Administration Department			
5.	BUS 308 Advanced Business Law (4)	D	10	$_{a}$ \mathbf{A}
6.	MKTG 412 Marketing Law (4)	U,D, PR		Α
Sch	ool of Business			
7.	Add MINOR in Business Administration	New		A
Eco	nomics Department (Pages numbered with New Program A	Proposal=p.1.)	
8.	Add MINOR in Business Economics	New	1	A
9.	ECON 301 Introduction to Managerial Economics (3)	D,M,C/S	4,6	Α
10.	ECON 306 Applied Forecasting (4)	D,M,C/S	4,7	A
11.	ECON 313 Intermediate Macroeconomics (4)	D,M,C/S	4,7	A
12.	ECON 314 Monetary & Fiscal Policies (4)	D,M,C/S	4,7	А
13.	ECON 339,340 Econometrics (4,4)	D,M,C/S	4,8	А
14.	ECON 410 Cost-Benefit Analysis (4)	D,M,C/S	4,8	А

			Type of Change	#	Comm. Action
Mana	gement I	Department (p.1=title page)			
15.	MGT 321	Management Information Systems (4)	T,D,M,C/S	5,6,14	Α
16.	MGT 322	Information Systems Analysis (4)	Т	6,14	Α
17.	MGT 325	Production & Operations Management (4)	M,C/S	5,6,14	Α
Maste	er of Busi	ness Administration (p.1=School of Business	, degree progr	ams)	
18.	GSB 511	Financial Accounting (4)	D	10	Α
19.	GSB 514	Legal Aspects of Management & the Market System (4)	N	11,16,	19 A
20.	GSB 521	Contemporary Managerial Accounting (4)	T,M,C/S	11,12,	19 A
21.	GSB 522	Quantitative Business Analysis I (4)	D	11,13	А
22.	GSB 533	Aggregate Economic Analysis & Policy (4)	M,C/S	11,19	Α
23.	GSB 543	Information Systems for Decision Support	N,M,C/S	11,15,	19 A
24.	GSB 551	Management in an International Environment (4)	N	11,15,	19 A
25.	GSB 552	Financial Analysis & Planning (4)	M,C/S	15,19	Α
26.	GSB 561	Business, Government, & Society (4)	N,D,	15,19	Α
27.	GSB 570	Entrepreneurship & Small Business Management (4)	New	14,15,	20 A
28.	GSB 570	Planning & the Process of Choice (4)	Drop	15	A
29.	GSB 576	Organizational Analysis, Planning & Decision Making (4)	N	15,19	А
30.	GSB 595	Organizational Change & Development (4)	N	15,16,	19 A
31.	GSB 596	Economic Forecasting (4)	D,M,C/S	16,17,	19 A

		Type of Change	#	Comm. Action
Curr	riculum changes in MBA degree (32-35)			
32.	ADD GSB 514 Legal Aspects of Management of the Market System (4). (Same number but different course.)		6	А
33.	Retain the course, "Management in an International Environment" but with the number of GSB 551, rather than GSB 514.		6	А
34.	ADD GSB 543 Information Systems for Decision Support (4) (Same number but different course content.)		6	A
35.	DROP GSB 543 Business, Government, & Society (4) ADD GSB 561 Business, Government, & Society (4)		6	A

4,27,29 A

RECOMMENDATIONS FROM THE ACADEMIC SENATE CURRICULUM COMMITTEE FOR PROPOSED CURRICULAR CHANGES FOR THE 1986 - 1988 CATALOG FROM

THE SCHOOL OF ENGINEERING

D=0	title description prefix	U=units n N=number M=mode	C/S=course staffing PR=prerequisite #=page of dept.propo	DA=d	pproved isapproved o recommenda	ation
				Type of Change	100	Comm . Action
Aeı	conautical	Engineering Depart	artment			
1.	AERO 201	Aerodynamics I	(3)	N	4,4a	Α
2.	AERO 306	Aerodynamics II	I (3)	PR	9b	Α
3.	AERO 409	Flight Test (3))	PR	9b	Α
4.	AERO 411	Space Technolog	gy (3)	PR	9b	Α
5.	AERO 412	Composite Struc	ctures (4)	New	2,2a-e	Α
6.	AERO 418	Introduction to	Flight Simulation (3)	New	2,2f-i	A
7.	AERO 423	Flight Control	Systems (3)	New	2,j-1	Α
8.	AERO 444	, 445 Flight Vel	nicle Design (4,4)	PR	9c	Α
9.	AERO 502	Flight Simulat:	ion (4)	New		A
10.			cal Vibrations & Laboratory al Engineering Degree		6c	Α
11.		0 405 Aerodynam: eering Degree	ics III from Aeronautical		6d	Α
12.		O 421 Stability Aeronautical Eng	% Control of Aircraft II			NR
Civi	l & Enviro	onmental Enginee	ring Department			
1.	CE 202,20	3 Mechanics of	Materials (3,2)	PR	25	Α
2.	CE 355 F	Reinforced Concre	ete Design (3)	D	85	Α
3.	CE 405 A	Advanced Strengtl	n of Materials (3)	N,D	4,5,27	Α
4.	CE 407 S	Structural Dynam	ics (4)	PR	26	Α
5.	CE 421	Transportation E	ngineering (4)	PR	27	Α
6.	CE 424 I	ublic Transporta	ation (4)	M,C/S	4,5,27	Α
-	a= 404		21 (2)		4 27 20	

7. CE 434 Ground Water Hydraulics (3)

			Type of Change	#	Comm. Action
Civ	vil & Envi	ronmental Engineering Department (cont'd.)			
8.	CE 527 T	raffic Engineering-Operations & Control(4)	PR	28	A
9.	CE 559 A	dvanced Structural Design (3)	New	4,5,29	A
10.	ENVE 240	Additional Engineering Laboratory (1-2)	Drop	3,31	Α
11.	ENVE 422	Environmental Radiation Surveillance (2)	Drop	3	Α
12.	ENVE 428	Meteorology (3)	Drop	3	A
13.	ENVE 309	Noise and Vibration Control (3)	D	31	A
14.	ENVE 435	Water and Waste Water Treatment (4)	Drop	3	A
15.	ENVE 436	Introduction to Hazardous Waste (3)	New	2,2a-d, 32a	A
16.	ENVE 439	Solid Waste Management (3)	U,PR,M	3,5,32	A
17.	ENVE 440	Solid Waste Management Laboratory (1)	Drop	3,32	·A
18.	ENVE 462	Senior Project (2)	U	4,5,32	Α
19.		4 Ground Water Hydraulics (3) to nmental Engineering Degree		17	A
20.		428 Meteorology (3) from Environmental ering Degree		17	A
21.	ADD ENVE 436 Introduction to Hazardous Waste (3) to Environmental Engineering Degree			Α	
22.		Water & Wastewater Engineering (4) to mental Engineering Degree			A
23.		422 Environmental Radiation Sur- nce (2) from Environmental Engineering			Α
24.		435 Water and Waste Water Treatment (4) nvironmental Engineering Degree			А

			Type of Change	#	Comm. Action
Der	partment o	of Computer Science			
Cou	rse chang	ges			
1.	CSC 101	FORTRAN Programming I (2)	T,M,D,C/S	49,66	Α
2.	CSC 111 Scien	Introduction to Computer Application for the aces (3)	New	2-5	А
3.	CSC 112	Pascal Programming (3)	New	2,6-8	A
4.	CSC 118	Fundamentals of Computer Science I (4)	T,D	49,66	Α
5.	CSC 201	FORTRAN Programming II (3)	T,PR	49,66	Α
6.	CSC 203	COBOL Programming (3)	Т	49,66	Α
7.	CSC 207	BASIC Programming (3)	Т	49,66	Α
8.	CSC 209	Selected Programming Languages (3)	D,PR	67	Α
9.	CSC 218	Fundamentals of Computer Science II (3)	New	2,9-11	A
10.	CSC 221	Computer Principles and Programming (4)	U,M,C/S	49-50,67	7 A
11.	CSC 304 tectu	Introduction to Digital Computer Archi- re (4)	U,M,C/S	49,50,67	7 A
12.	CSC 309	Microcomputer Architecture & Programming (4)	PR	67	Α
13.	CSC 325	Operating System Control Languages (3)	Drop	47	Α
14.	CSC 331	Numerical Linear Analysis (3)	D	68	NR
15.	CSC 333	Numerical Analysis II (3)	D	68	А
16.	CSC 340	Software Tools (4)	U,M,C/S	49,50,68	3 A
17.	CSC 345	Data Structures (3)	PR	68	А
18.	CSC 347	Introduction to Database Systems (4)	N,T,U,C/S,	49,50, 69,70	А
19.	CSC 350	Discrete Dynamic systems (3)	M,PR M,C/S	68	Α
20.	CSC 351	Programming Languages Design I (3)	PR	68	Α
21.	CSC 360	Continuous Dynamic Systems (3)	M,C/S	68	Α

			Type of Change	#	Comm. Action
Depa	artment of	Computer Science (cont'd.)			
22.	CSC 404	Telecommunications & Distributed Systems (4)	U,M,C/S	49,50	A
23.	CSC 411	Advanced Programming for Education (3)	New	2,12,13	A
24.	CSC 413	Authoring Languages (3)	New	2,14-16	A
25.	CSC 414	Computer Assisted Instruction (3)	D	69	A
26.		Computer Application in School istration (3)	D	69	A
27.	CSC 420	Artificial Intelligence Survey (3)	D	69	Α
28.	CSC 421	Knowledge-Based systems (3)	New	2,17-19	A
29.	CSC 427	Computer Based Educational Systems (3)	New	2,20-22	A
30.	CSC 431	Numerical Analysis III (3)	D, PR	69	NR
31.	CSC 440	Software Engineering (3)	T,PR,M,C/S	49,69	A
32.	CSC 444	Health Information Systems (3)	D	67	Α
33.	CSC 445	Theory of Computing I (3)	New	2,23-25	Α
34.	CSC 447	Principles of Database Systems (3)	New	2,26-28	A
35.	CSC 453	Introduction to Operating Systems (4)	U,M,C/S	49,50,71	Α
36.	CSC 456	Computer Graphics II (3)	New	2,29-31	Α
37.	CSC 500	Directed Study (2-3)	New	2,32-34	Α
38.	CSC 501	Languages & Translators (4)	T,N,D	49,72	Α
39.	CSC 502	Database Systems (4)	T,N,D,PR	49,72	Α
40.	CSC 503	Operating Systems (4)	T,N,	49,73	Α
41.	CSC 504	Advanced Computer Architecture (4)	New	2,3 5 -37	Α
42.	CSC 505	Theory of Computing II (4)	New	2,38-40	Α
43.	CSC 506	Artificial Intelligence (3)	New	2,41-43	Α
44.	CSC 507	Computer Simulation I (4)	N	49	A
45.	CSC 517	Computer Simulation II (4)	N,M,C/S	49,71	A

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		Type of Change	#	Comm. Action
Dej	partment of Computer Science (cont'd.)			-
46	. CSC 527 Advanced Computer Based Educational Systems (3)	New	2,44-46	A
47	. CSC 531 Numerical Methods I (4)	T,D,PR	49,71,72	A
48	CSC 532 Numerical Methods II (4)	T,D,PR	49,71,72	Ā
49.	. CSC 542 Advanced Database Topics II (4)	Drop	47,71	A
50.	CSC 559 Practicum in Computer Science I (1)	D	73	A
51.	CSC 560 Practicum in Computer Science II (5)	D	73	A
52.	CSC 570 Advanced Topics in Computer Science (2-3)	T,U,D	49,50	A
53.	DROP CSC 222 Digital Computer Symbolic Programming (3) for the Computer Science Degree		55	A
54.	DROP CSC 219 Linear Programming (3) from the Computer Science Degree		56	A
55.	B.S. Degree in Computer Engineering (joint offering with EL/EE Department)	New		A
56.	CPE 461,462 Senior Project (3,2)	New	2-6	Α
57.	CPE 463 Undergraduate Seminar (1)	New	2,7-9	Α
Dep	artment of Electronic & Electronical Engineering			
1.	EE 302 Linear Control Systems (3)	PR	9a	Α
2.	EL 339 Electrical Engineering: Its Development & Impact on our Society & Culture (3)	New	2,2a-c	DA
3.	EL 401 Electromagnetic Fields II (3)	D	9f	A
4.	EL 443 Optoelectronics Laboratory (1)	New	2,2d-f	A
5.	EL 446 Microprocessor Interfacing Laboratory (1)	PR	9h	A
6.	EE 461 Senior Project (3)	U	4a,9c	A
7.	EL 461 Senior Project (3)	U	4a	A
8.	EL 521 Computer Systems (3)	PR	9i	A
9.	EL 522 Microprocessor-Based Digital System Design (4)	PR	9i	A
10.	EL 530 Electro-Optics Systems (3)	New	2,2g-i	A
11.	ADD ETME 157 Electronic Manufacturing (3) to degrees in Electronic & Electrical Engineering		6a,6i	А
12.	DROP ETEL 151 Electronic Graphics & Standards from degrees in Electronic & Electrical Engineering		6a,6i	А
13.	ADD PHYS 211 Modern Physics (4) to Electrical Engineering degree		6b	Α
14.	DROP PHYS 210 Introduction to Modern Physics from Electrical Engineering degree		6c	A

			Type of Change	#	Comm. Action
Depa	rtment of	Electronic & Electrical Engineering (cont'd.)			
15.		28 Discrete Time Systems (3) to Electrical earing degree		6c	A
16.		63 Undergraduate Seminar (2) from Electrical ering degree		6d	A
17.		63 Undergraduate Seminar (2) from Electronic ering degree		6g	A
18.		ree in Computer Engineering (joint offering The Computer Science Department)	New		A
Depa	rtment of	Engineering Technology			
1.	ETMP 144	Manufacturing Processes: Machining I (2)	D	31,31a	Α
2.	ETMP 145	Manufacturing Processes: Machining II (2)	D	31,31b	Α
3,	ETMP 157	Electronic Manufacturing (3)	New	2,2hi,31	Α
4.	ETEL 151	Electronic Graphics & Standards (2)	Drop	3	Α
5.	ETMP 153	Electronic Assembly Techniques (2)	Drop	3,84	Α
6.	ETMP 158	Introduction to Robotics (2)	New	2k,31	A
6a.	ETMP 240	Additional Engineering Laboratory (1)	D	31,31a	Α
7.	ETMP 323	Tool Design (3)	Drop	3,15,84	Α
8.	ETMP 321,	322 Tool Design (3,3)	PR	31	Α
9.	ETMP 336	Numerical Control Programming (3)	D, PR	32,32a	Α
10.	ETMP 421	Computer Aided Manufacturing Technology (3)	D, PR	32,32a	Α
11.	ETMP 434,	435,436 Tool & Manufacturing Engineering (3,3,3	B)D,PR	32,32a	Α
12.	ETAC 122	Environmental Graphics (2)	Drop	3,26	Α
13.	ETAC 123	Environmental Graphics & System Design (3)	D,U	4,5,26	Α
14.	ETAC 201	Air Conditioning & Refrigeration Codes (4)	M,U	4,26	Α
15.	ETAC 301	Computer Aided HVAC (3)	M,C/S	4,5,26	Α
16.	ETAC 339	Heat Exchanger Technology (3)	N	4,26,5	Α
17.	ETAC 445	HVAC Controls Technology	T,PR	4,5,27	Α
18.	ETME 142	Engineering Drawing (1)	D	29	Α
19.	ETME 205	Statics for Engineering Technology (3)	T	4,29	Α
20.	ETME 206	Dynamics for Engineering Technology (4)	Т	4,29	Α
21.	ETME 240	CAD Project Laboratory (1)	New	2,2c,d	Α
22.	ETME 301	Thermodynamics for Engineering Technology (4)	Т	4,30	Α
23.	ETME 311	Fluid Mechanics for Engineering Technology (4)	T,PR	4,30	A
24.	ETME 344	Advanced Design Drawing (2)	D	4,30	Α
25.	EIME 406	Vibrations for Technology (2)	New	22e,f	Α

			Type of Change	#	Comm. Action
		of Engineering Technology (cont'd.)		2 2 1	
26.		Technical Supervision for Industry (1)	New	2,2a,b	_
27.		Passive Network Analysis (4)	N,D,PR	4,28	A
28.	ETEL 44	Anni Calabar (20 anni C	PR	28	Α
29.		19 Computer Technology II (4)	D	29	A
30.		52 Micro Bonding (2)	D, PR	32,32b	A
31.		24 Welding Technology (4)	D	32	A
32.		TH 133 Technical Calculus (4) to Engineering nnology degree		8,11	Α
33.		courses in Digital Computer Programming (2) to Ineering Technology degree (CSC or ENGR courses)		8,10,11	Α
34.		VGR 251 Digital Computer Applications (2) from neering Technology degree		8	Α
35.		units of electives in <u>each</u> of options in neering Tech.		8,13-17	Α
36.		AC 339 Heat Exchanger Technology (3) to Air Hitioning-Refrigeration option		13	Α
37.		ME 320 Mechanisms (3) to Manufacturing Processes anology option		15	Α
Depa	rtment c	of Industrial Engineering			
1.	IE 101	Introduction to Industrial Engineering (2)	U,D,M,C/S	4,5,20	A
2.	IE 121	Industrial Systems Analysis (2)	U,N	4,5,20	A
3.	IE 131	Work Measurement & Design (3)	N,T,U	4,5,21	Α
4.	IE 142	Manufacturing Processes II (2)	Drop	3	A
5.	IE 222	Engineering Analysis (3)	D	21	Α
6.	IE 233	Computer Aided Manufacturing (2)	PR	21	DA
7.	IE 261	Problem Solving in Industrial Engineering (2)	New	2-2c,21	Α
8.	IE 303	Project Management (2)	PR	21	A
9.	IE 304	Operations Research (3)	D, PR	21	A
10.	IE 305	Operations Research II (4)	N,U,PR,M,C/S	4,5,22	A
11.	IE 312	Data Management & System Design (3)	PR	21	DA
12.	IE 316	Microprocessors as Control Devices (2)	U,M,C/S	4,5,22,22	a A
13.	IE 326	Engineering Test Design & Analysis (3)	N	4,5,22,23	B A
14.	IE 334	CAD/CAM (3)	PR	22	A
15.	IE 343	Facilities Design (4)	PR	22	A
16.	IE 363	Junior Colloquium (1)	New	2,2d-e,22	2 DA
17.	IE 407	Algorithmic Systems Analysis (4)	U,D,M,C/S	4,5,22	A

		Type of Change	#	Comm. Action
	artment of Industrial Engineering (cont'd.)			
18.	IE 409 Economic Decision Systems (3)	T,D,PR	4,5,22	A
19.	IE 410 Inventory Control Systems (4)	T,U,M,D,PR	4,5,23	A
20.	IE 411 Production Systems Analysis (3)	N, PR	4,5,22- 22a,23	Α
21.	IE 413 Flexible Manufacturing system (3)	PR	23	A
22.	IE 420 Simulation for Design Analysis (4)	U		.A
23.	IE 421 Manufacturing Organization (3)	<u>PR</u>	23	.DA A
24.	IE 425 Reliability Assurance (3)	PR	23	A
25.	IE 426 Engineering Test Design & Analysis II (3)	New	2,2f-h,23	Α
26.	IE 430 Statistical Quality Control (3)	PR	23	A
27.	IE 437 Human Factors Engineering II (4)	PR	23	A
28.	DELETED			
29.	IE 461,462 Senior Project (2) (3)	PR	23	DA
30.	IE 541 Advanced Operation Research (3)	PR	24	A
31.	IE 542 Reliability Engineering (3)	PR	24	A
32.	IE 543 Advanced Human Factors (4)	PR	24	A
33.	IE 544 Advanced Topics in Engineering Economy (3)	New	2,2i-j, 24	A
34.	IE 545 Advanced Topics in Simulation (3)	New	2,2k-1, 24	A
35.	DROP IE 251 Manufacturing Engineering Laboratory (4) from IE major		11	A
36.	DROP CE 204 Strength of Materials (3) from IE		12	Α
37.	DROP ME 341 Fluid Mechanics (3) from IE		13	Α
38.	DROP EL 361 Electronics Laboratory (1) from IE		13	A
39.	ADD IE 316 Microprocessors as Control Devices (2) to IE major courses		16	A
40.	ADD MET 306 Material Engineering (3) as support course in IE		8,12,16	A
41.	ADD MET 341 Material Engineering Lab (1) as support course in IE		8,12,16	A
42.	ADD IE 312 Data Management Systems Design Facilities (3) to major courses in IE		12	A
43.	ADD IE 363 Junior Colloqium (1) to support courses in I	Ξ	12,16	DA
44.	ADD IE 426 Engineering Test Design & Analysis II (3) to major courses in IE		12,16	A

			Type of Change	#	Comm.
	Depa	rtment of Industrial Engineering (cont'd.)			
	45.	ADD IE 407 Algorithmic Systems Analysis to major courses in IE		12,16	Α
	46.	ADD IE 410 Inventory Control Systems (4) to major courses in IE	16.	13,16	Α
	47.	ADD IE 411 Production Systems Analysis (2) to major courses in IE		13,16	Α
	48.	ADD IE 420 Simulation Design and Analysis (4) to major in IE		13,16	A
	49.	ADD IE 544 Advanced Topics in Engineering Economy (3) to recommended courses in specialization in Master's degree		14	A
	50.	ADD IE 545 Advanced Topics in Simulation (3) to recommended courses in specialization in Master's degree		14	A
	51.	DROP Concentrations from the IE Degree		18	A
į.	Depa	rtment of Mechanical Engineering			
)	1.	ME 240 Additional Engineering Laboratory (1)	New	2,3,4	A
	2.	ME 317 Vibrations Laboratory (1)	PR	29	A
	3.	ME 324 Kinematics (4)	PR	29	A
	4.	ME 327 Introduction to Design (5)	D, PR	29	A
	5.	ME 343 Thermodynamics Laboratory (1)	PR	29	Α
	6.	ME 345 Fluid Mechanics Laboratory (1)	PR	30	Α
	7.	ME 401 Stress Analysis (4)	PR	30	A
	8.	ME 412 Composite Materials Analysis & Design (4)	New	2,5	Α
	9.	ME 424,425 Design of Piping Systems (4,4)	PR	30	Α
	10.	ME 432 Petroleum Reservoir Engineering (4)	T,M	10,30	A
	11.	ME 434 Petroleum Recovery Methods (4)	PR	31	Α
	12.	ME 435 Petroleum Production Development (4)	PR	31	Α
	13.	ME 551 Mechanical Systems Analysis (4)	U,M,C/S	10,16,33	A
	Depar	rtment of Metallurgical Engineering			
	1.	MET 121 Introduction to Metallurgical Engineering (1)	New	2,3,4,23	Α
	2.	MET 122 Introduction to Metallurgical Engineering Lab(1)	New	2,5-7,23	Α
)	3.	MET 222 Physical Metallurgy (4)	U	11,22	A
	4.	MET 223 Physical Metallurgy (3)	U	11,24	A
	5.	MET 301 Physical Properties of Materials (3)	T	11,24	A
	6.	MET 306 Materials Engineering (3)	PR	24	A

		Type of Change	#	Comm. Action	
Dep	artment of Metallurgical Engineering (cont'd.)				
7.	MET 434 Welding Engineering (3)	T,M,C/S	25	A	
8.	MET 440 Failure Analysis Laboratory (1)	New	2,8,9,26	A	
9.	MET 462 Senior Project (3)	Ŭ	11,20,25	A	
10.	MET 470 Selected Advanced Topics (1-3)	Drop	10,25	A	
11.	MET 471 Selected Advanced Laboratory (1-3)	Drop	10,25	A	
12.	ADD MET 121 Introduction to Metallurgical Engineering to ME degree		14	Α	
13.	ADD MET 122 Introduction to Metallurgical Engineering Lab. to ME degree		14	Α	
14. ADD ETME 142 Engineering Drawing to ME degree			14	A	
15. ADD MET 440 Failure Analysis Laboratory to ME degree			171	A	
16. DROP Advanced Technical Topics (3) from ME degree			17	A	
17. Add 3 units of free electives to ME degree			17	A	
Engineering Science ON 6-7-86 Gus W states that Fort did not approve. 1. ADD "Biochemical Engineering" concentration in Engineering Science degree.				A 🗸	
2. ADD "Modeling and Simulation" concentration in Engineering Science degree.			2,3,8a,b 25-26	Α	
3. ADD "General" concentration in Engineering Science Degree.			2,3,8a	A	
School of Engineering					
1.	ENGR 111 Introduction to Plant Engineering (2)	Drop	9,21	A	
2.	ENGR 302 Plastic Design (2)	Drop	9,21	Α	

Please note: Proposed changes involving the Master's Degrees in the School of Engineering will be submitted later.

A=approved

DA=disapproved

T=title

D=description

U=units

N=number

RECOMMENDATIONS FROM THE ACADEMIC SENATE CURRICULUM COMMITTEE FOR PROPOSED CURRICULAR CHANGES FOR THE 1986 - 1988 CATALOG FROM

THE SCHOOL OF SCIENCE AND MATHEMATICS

PR=prerequisite

C/S=course staffing

	refix	M=mode	#=page of dept.propos		ecommen	
				Type of Change	#	Comm. Action
S ch	ool of Science	ce & Mathematics				
1.	SCM 100 Or: & Mathemat	ientation to the Sch tics (2)	hool of Science	New	2	A
Bio	logical Scien	nces Department				
2.		e Culture Technolog al Sciences Degree	y Concentration,	New	2-21A	А
3.	Botany Conce	entration, Biologica	al Sciences Degree	Drop	2	Α
4.	BOT 350 Pla	ant Tissue Culture	Technology (4)	New	51	Α
5.	BOT 450 Pla	ant Tissue Culture A	Applications (4)	New	53	Α
6.		s in Core in Biolog: Physiology 1: Gene or	ical Sciences Degree: eral (4)		4,71	A
		Introductory Plant	Physiology (4) for the hnology Concentration			
7.		General Ecology (3	ical Sciences Degree:)		4,71	A
		or Plant Ecology for t Te Concentration	the Plant Tissue			
8.	ZOO 238,239	Human Physiology	(3) (3)	Drop	56-62	DA
9.	ZOO 300 Hum	nan Physiology (5)		New	56-62	DA
10.	Sciences	ogy Concentration in Degree: Field Botany (4)	n Biological		5	А
11.	Sciences	ogy Concentration in Degree: Sanitary Microbio	_		5	A
12.	Sciences	ogy Concentration in Degree: Vertebrate Field Zo	_		5	A
13.	Sciences	gy Concentration in Degree: Introductory Conse			5	A
14.	Sciences	ology Concentration Degree: Human Ecology (3)	n in Biological		5	A

		Type of Change	#	Comm. Action
Biological Sciences Department (cont'd.)				
15.	ADD new alternative in Support Courses in Biological Sciences Degree for students in Plant Tissue Culture Concentration: CHEM 371,373 General Biochemistry I, III		71–72	Α
16.	BIO 302 Human Genetics (3)	т	64,65	Α
17.	BIO 343 Systematic Botany (3)	Т	64,66	Α
18.	BIO 500 Individual Study (1-3)	D	103-4	Α
19.	BIO 501 Cellular Biology (3)	New	38	Α
20.	BIO 502 Biology of Organisms (3)	New	42	Α
21.	BIO 503 Population Biology (3)	New	45	Α
22.	BIO 527 Cell Physiology (3)	Drop	62	Α
23.	BIO 99 Agricultural Biology (3)	Drop	62	Α
24.	Ecology Concentration, Environmental & Systematic Biology Degree	New	22-23	А
25.	Fisheries & Wildlife Concentration, Environmental & Systematic Biology Degree (Note: This approval does not relate to the Provost directive that the "Fisheries & Wildlife" concentration should be such that it can be taken also under the Natural Resources Management Major.)		22-23	A
26.	Systematics Concentration, Environmental & Systematic Biology Degree	New	22-23	A
27.	CONS 120 Fisheries & Wildlife Management (3)	P	64	A
28.	CONS 201 Lake Management (4)	P	64	A
29.	CONS 207 Resource Survey (3)	P	64	A
30.	CONS 221 Wildlife Techniques (3)	P	64	A
31.	CONS 320 Fishery Resource Management (4)	P,PR	64	A
32.	CONS 325 Wildlife Habitat Management (4)	P,PR	64	A
33.	CONS 420 Culture of Fishes (4)	P	64	А
34.	CONS 426 Resource Population Dynamics (3)	P,PR	64	A
35.	CONS 427 Marsh Management (4)	P,PR	64	A
36.	ADDITION to Core in Environmental & Systematic Biology Degree: BIO 442 Biometry (4)		74	A
37.	ADDITION to Core in Environmental & Systematic Biology Degree: BACT 221 General Bacteriology (4)		74	A
38.	ADDITION to Core in Environmental & Systematic Biology Degree:			
	BIO 325 General Ecology (3)		74	Α

		Type of Change	#	Comm. Action
Biol	ogical Sciences Department (cont'd.)			
39.	DROP from Core in Environmental & Systematic Biology Degree: ZOO 329 Vertebrate Field Zoology (4)		74	A
40.	ADDITION to Support Courses in Environmental & Systematic Biology: ENGL 318 Writing for Scientific Journals (4)		75,89	A
41.	DROP from Environmental & Systematic Biology Degree: BIO 462 Senior Project (2)		76	A
42.	DROP from Environmental & Systematic Biology Degree: BIO 463 Undergraduate Seminar (2)		76	Α
43.	Alternative in Core in Environmental & Systematic Biology Degree: BOT 333 Field Botany (4) or		89	Α
	BOT 337 Algology (4) for Fisheries & Wildlife Concentration			
44.	Alternative in Support in Environmental & Systematic Biology Degree: ENT 326 General Entomology (4)		89	Α
	ZOO 336 Invertebrate Zoology (4) for Fisheries & Wildlife Concentration			
45.	Alternative in Support Courses in Environmental & Systematic Biology: CSC 111 or CSC 110		89	A
46.	BIO 330 Biology of Human Aging (3)	New	36-37c	A
47.	BIO 531 Theory and Prediction in Ecology (2)	New	36,47-	48 A
47a.	BIO 580 Biology Colloquium (2)	New	36,49-	50 DA
47b.	12 units specified for "Biology" Concentration in the Biological Sciences Degree.		5	. А
47c.	16 units specified for "Marine Biology" Concentration in the Biological Sciences Degree.		5	А
47d.	16 units specified for "Plant Pathology and Ento- mology" Concentration in the Biological Sciences Degree.		5	А
47e.	The "Anatomy and Physiology" Concentration is asking for an exception to specifying 12 units.		5, Letter	А
47f.	BOT 238 Native Plants	U,D,T		А

			Type of Change	#	Comm. Action
Chen	nistry Depa	artment			
48.	CHEM 156	General Chemistry Laboratory (1)	D	23	A
49.	CHEM 331	Quantitative Analysis (5)	D	24	A
50.	CHEM 332	Quantitative Analysis (4)	D	24	А
51.	CHEM 439	Instrumental Analysis (5)	D	24	A
52.	CHEM 459	Undergraduate Seminar (2)	PR	26	Α
53.	CHEM 501	Physical Chemistry Thermodynamics (3)	D	27	Α
54.	CHEM 573	Advanced Biochemistry (3)	D	28	Α
55.		332 Quantitative Analysis (4) as a red course in the Chemistry Degree		19a	А
Mathematics Department					
56.	MATH 300	Microcomputers in Mathematical Education (2)	New	2,3	Α
57.	MATH 370	Putnam Exam Seminar (2)	New	2,6	Α
58.		1 105 Hand-held Calculators (1) from ng Option		15	А
59.		ts of electives from MATH 242,300,313 6,413,414 in the Teaching Option		19	А
60.		14 Computer Assisted Instruction (3) Teaching Option		15	А
61.		221 Computer Principles & Programming a core requirement in the mathematics .		lla	A
62.	(3) to	21 Computer Principles & Programming support courses of Applied Mathematics te Mathematics options.		14	A
63.	MATH 403 Educat	Issues in Secondary School Mathematics ion (3)	Drop	8	А

			Type of Change	#	Comm. Action	
Math	nematics De	epartment (cont'd.)				
64.	MATH 335	Graph Theory (3)	D	9a,22	Α	
65.	MATH 336	Combinatorial Mathematics (3)	D	9a,22	Α	
66.	MATH 424	Organizing and Teaching Mathematics (4)	D,U,PR	9a,23	A	
67.	MATH 442	College Geometry (3)	D,T	9a,24	A	
68.	MATH 443	Non-Euclidean Geometry (3)	D,T	9a,24	Α	
69.	MATH 444	Projective Geometry (3)	D, T	9a,24	Α	
70.	MATH 459	Undergraduate Seminar (2)	PR	9a	A	
71.		1 242 Differential Equations (4) from n Mathematics		11a	A	
72.		242 Differential Equations (4) to d Math. Option		14	A	
73.		242 Differential Equations (4) to Math. Option		14	A	
Physics Department						
74.	PHYS 401	Thermal Physics II (3)	New	3,50	A	
75.	PHYS 423	Advanced Optics (3)	New	5,51	Α	
76.	PHYS 444	Theoretical Physics (3)	New	8,51	Α	
77.	PHYS 100	Introduction to Physics (1)	Drop	12	Α	
78.	PHYS 134	General Physics (3)	Drop	12,48	А	
79.	PHYS 131	General Physics (4)	D	48	A	
80.	PHYS 132	General Physics (4)	D	48	А	
81.	PHYS 133	General Physics (4)	D	48	Α	
82.	PHYS 206	Instrumentation in Experimental Physics (2)	D	49	А	
83.	PHYS 207	Instrumentation in Experimental Physics (2)	D	49	А	

		Type of Change	#	Comm. Action		
Phys	sics Department (cont'd.)					
84.	PHYS 211 Modern Physics (4)	D	49	Α		
85.	PHYS 323 Physical Optics (4)	D	19,50	Α		
86.	PHYS 421 Nuclear Reactor Physics (4)	Drop	12	Α		
87.	PSC 171 Nuclear Arms Race (3)	T	14-16,52	DA		
88.	PSC 171 Science & Society (3)	D	14-16,52	Α		
89.	DROP PHYS 134 General Physics (3) from Physics Degree		28	Α		
90.	DROP PHYS 406 Solid State Physics (3) from Physics Degree		29	A		
91.	DROP PHYS 456 Solid State Physics (1) from Physics Degree		29	A		
92.	Change electives in Physics courses in Physics Degree from 9 to 18 units.		39	A		
Statistics Department						
92a. Statistics Minor New			2-8k	Α		
93.	DROP CSC 101 Fortran (2) from Statistics degree		16	Α		
94.	STAT 211 Elementary Probability & Statistics (3)	D	27	Α		
95.	STAT 212 Statistical Methods (3)	D	27	Α		
96.	STAT 252 Statistical Inference for Management II (3)	D	28	А		
97.	STAT 321,322 Statistical Analysis (3) (3)	D	28	А		
98.	STAT 330 Statistical Uses of Computers (3)	PR	28	А		