

ADVISEMENT & GRADUATION CHECKOUT PROCEDURES

for the

MECHANICAL ENGINEERING DEPARTMENT

College of Sciences and Engineering

2021-2023 Catalog

www.subr.edu/ME

Revised: August 16, 2021

Table of Contents

I.	Introduction	3
II.	Academic Advisement	3
III.	Admission Requirements	3
III.1.	Transfers from the University College	3
III.2.	Transfers from Other Areas of the University	4
III.3.	Transfers from the Other Universities	4
IV.	Academic Advisement Procedures	5
IV.1.	Components of Academic Advisement	5
IV.2.	Academic Advisement Procedures & Tools – Banner Self-Service and ME Student Moodle Site Instructions	7
IV.3.	Academic Advisement Procedures & Tools – RAFT Form	9
IV.4.	Academic Advisement Procedures & Tools: 2021-2023 Degree Requirements Records Form	10
IV.5.	Academic Advisement Procedures & Tools: 2017-2020 Degree Requirements Records Form	11
IV.6.	Academic Advisement Procedures & Tools: 2014-2017 Degree Requirements Records Form	12
IV.7.	Academic Advisement Procedures & Tools: 2010-2014 Degree Requirements Records Form	13
IV.8.	Academic Advisement Procedures & Tools: ME Curriculum Flowchart – Style I	14
IV.9.	Academic Advisement Procedures & Tools: ME Curriculum Flowchart – Style II	15
IV.10	Academic Advisement Procedures & Tools: Course Prerequisites and Corequisites	16
V.	Degree Requirements	17
V.1.	General Education Requirements	17
V.2.	CORE Mathematics and Science Requirements	18
V.3.	Departmental Course Requirements	18
V.4.	Other University and Department Requirements	18
V.5.	Technical Elective Requirements	19
V.6.	Transfer Credits	20
V.7.	Residency Requirement	20
VI.	Graduation Checkout Procedures	22
VII.	Appendix	24
VII.1.	Request for Substitution of Course Form	25
VII.2.	Degree Candidate's Official Check-Out Sheet	26
VII.3.	Graduation Application Data Sheet	27
VII.4.	Graduating Student Exit Survey	28

I. Introduction

Greetings and welcome to the Department of Mechanical Engineering at Southern University, Baton Rouge. We hope that your association with us will prove to be interesting, challenging, and profitable. We strive to provide you with necessary information to make your stay here a pleasant experience. All of the faculty and staff are here to serve you and they are consistently available to help you.

In the information presented below, you will find registration and advisement procedures that will assist in navigating you through the ME curriculum and the graduation application and checkout process. The information provided here is not an exhaustive list of rules, regulations, and requirements. The Southern University and A&M College Catalog is the definitive rulebook for all aspects of your matriculation. You are required to review and keep abreast of its contents, with emphasis on the section entitled **Enrollment Privileges and Responsibilities**. This section includes information that is applicable to you as a student and that may affect several aspects of your graduation requirements.

II. Academic Advisement

The primary purpose of academic advisement is to assist students in successfully completing the degree requirements associated with their Mechanical Engineering Program. This includes counseling students on issues pertaining to:

- Understanding institutional support services available to them,
- Understanding institutional policies and procedures,
- Development of educational plans,
- Selection of appropriate courses and other educational experiences, and
- Evaluation of progress toward fulfilling graduation requirements.

III. Admission Requirements

III.1. Transfers from the University College

Students who are interested in majoring in Mechanical Engineering (ME) must satisfy the requirements needed to exit from the University College and, subsequently, satisfy the admission requirements for entering the College of Sciences and Engineering (CSE). Admission to the CSE is open to students who have successfully earned 30 or more credit hours and meet the requirements listed in Table 1. Applicants who partially satisfy the requirements listed in Table 1, and have not adequately passed all courses, may be "Conditionally Admitted." This action is contingent upon applicants enrolling at the next opportunity in each missing course cited and earning a "C" or better within one year.

Prospective students must have earned a "C" or better in each of the courses listed per the selected major and have earned a "C" or better in prerequisite courses. Furthermore, prospective student must pass the University Writing Proficiency Examination.

Table 1. College of Engineering and Science Admission Requirements for Students Majoring in Mechanical Engineering

Course Name	Course Number	Credit Hours
Freshman Composition	SENL 101B/102B	3/3
Calculus I	SMAT 211B	4
General Chemistry I	SCHE 132B/132LB	3/1
General Physics I	SPHY 213B/213LB	3/1
Freshman Engineering I/II	ENGR 120B/130B	2/2

III.2. Transfers from Other Areas of the University

Students transferring from other colleges at the University must meet the same above requirements. Transfer credits are acceptable for the ME program if they represent course requirements in the ME curriculum. Course work pursued at other colleges shall be reviewed and approved by the ME Departmental Chair and by the Dean of the College for its applicability to the specific requirements for a degree.

III.3. Transfers from the Other Universities

Students transferring from other approved colleges or universities must meet the admission requirements of the University and the College of Sciences and Engineering. Transfer students must submit an official transcript of courses completed at other institutions together with evidence of good standing to the Registrar at Southern University and A&M College and another copy of the transcript(s) to ME Department Chair.

Course work pursued at other institutions shall be reviewed by the departmental chair and the Dean for its applicability to the requirements for a degree.

IV. Academic Advisement Procedures

IV.1. Components of Academic Advisement

The academic advisement procedures that are established in the ME department include the following components:

 To facilitate a university-wide advisement process, collaborative procedures have been developed and implemented in cooperation with the faculty and staff of the University College (UC). The team at UC (<u>www.subr.edu/UniversityCollege</u>) is mainly responsible for providing orientation, programming, peering mentoring experiences, and academic advisement and guidance for incoming students who have earned fewer than 30 semester credit hours.

Table 2. Academic and Career Advisors for Students in the Mechanical Engineering Program

First Letter of Student's Last Name	Academic and Career Advisor	Email or Phone	Office Location
А, В	Dr. Stephen Akwaboa	Stephen_Akwaboa@subr.edu (225) 771-2709	Pinch 366
С	Dr. Stephen Akwaboa Dr. Dwayne Jerro	Stephen_Akwaboa@subr.edu (225) 771-2709 or 771-3580	Pinch 366 Pinch 334
D	Dr. Amitava Jana Dr. Fareed Dawan	Amitava_Jana@subr.edu (225) 771-5792 or 771- 2207	Pinch 345 Pinch 351
E, F, G	Dr. Amitava Jana	Amitava_Jana@subr.edu (225) 771-5792 or 771-3580	Pinch 345
Н, І, Ј, К,	Dr. Edgar Blevins	Edgar_Blevins@subr.edu (225) 771-4736	Pinch 359
L, M, N, O, P	Dr. Brian Warren	Brian_Warren@subr.edu (865) 368-7913	Pinch 370
Q, R, S	Dr. Dwayne Jerro	Dwayne_Jerro@subr.edu (225) 771-3580	Pinch 334
T, U, V, W, X, Y, Z	Dr. Fareed Dawan	Fareed_Dawan@subr.edu (225) 771-2207	Pinch 351
All Transfer Students	Dr. Dwayne Jerro	Dwayne_Jerro@subr.edu (225) 771-3580	Pinch 334
Graduating Senior Final Check Out	Dr. Dwayne Jerro	Dwayne_Jerro@subr.edu (225) 771-3580	Pinch 334
University College Academic Advisor for All Incoming Freshman with 0 to 30 Credit Hours	Ms. Robyn Williams	Robyn.Williams@sus.edu (225) 771-5399	Stewart Hall Room 309

2. When students transition to the Mechanical Engineering program from UC oversight, they are assigned to a departmental academic and career advisor on an alphabetical basis. All transfer students from are initially assigned to the chair, who will be responsible for identifying and evaluating courses previously taken at other institutions that can be transferred as equivalent courses in the ME curriculum. Many times, the Chair may be assisted by a senior faculty with this audit of courses taken elsewhere. This same process is also performed on students who transfer to the ME Program from other academic programs on campus.

Table 2 depicts the assignment of Mechanical Engineering Academic and Career Advisors via the first letter of students' last name. For transfer students, once the transfer course equivalencies have been established, the student will also then be assigned to an advisor according to this table for the remainder of their curriculum matriculation. Furthermore, all prospective degree candidates of the ME department are first advised by their academic advisor and then by the department's chair.

2. Academic advisors provide students with information and guidance concerning the ME program and they also approve students' schedules of classes throughout their matriculation in the program. All ME students are required to meet with their academic advisor early during registration periods; wherein they complete a Registration Advisement Form and Table (RAFT) that acknowledges each advisement encounter. This form is attached to the set of procedure forms given to each student. It should be noted



that all students must first be cleared by their assigned academic advisor before being authorized to engage in regular registration, cross-registration, or other external registration activities.

- 3. All ME students are required to meet with their academic advisors at least once during a semester to discuss their individual progress toward earning the Bachelors of Science (B.S.) degree in Mechanical Engineering.
- 4. Academic advisors will make every effort to counsel their advisees regularly, with special attention being focused on those students with a poor academic performance. A meeting should be set immediately following the publication of mid-term grades with advisees who have critical GPA-related problems.
- 5. All ME students are required to satisfy course prerequisites as outlined in the description for required courses.

- 6. Students are to select a curriculum path (or plan) and then faithfully follow the inherent graduation requirements. They may choose to adhere to the catalog in force during the year they began their matriculation at Southern University or any subsequent catalogue issued thereafter.
- 7. The academic advisor will use the department "**Degree Requirements Record Form**" that is based on the appropriate curriculum taken from the catalog that a student chooses to use as the basis for graduation checkout.
- 8. The department will maintain an accurate master file for all students enrolled in the ME program. These files will include transcripts, grade reports, schedules of classes, personal data, a degree requirements record form, and other appropriate academic documents.
- 9. Each academic advisor will maintain an accurate list of his/her advisees and will have access to the Banner System that contains authoritative proof of students' complete academic record.

IV.2. Academic Advisement Procedures & Tools – Banner Self-Service and ME Student Moodle Site Instructions

The modernization of advisement at the University has been a process of continuous development and improvement. Students and Advisors can find the Southern University Banner Self-Service links website via the Southern University's home page (www.subr.edu) or at the following URL www.subr.edu) page/it-services. On the IT Services page, the visitor will see the Banner Self-Service icon (or link), which leads the to the Banner Self-Service access page. The student can then access their records by using their Banner Student Number (i.e., S-number or U-number) and an assigned PIN. This academic advisement system offers access to services such as online academic records, class schedule, student demographic data, degree curricula, interactive registration, course descriptions, and course prerequisites. This system is being used to improve academic planning throughout students' matriculation.

Furthermore, for the last the last couple of semesters and as a pilot program, the ME Advisement and Course Enrollment process has been moved inside of the Mechanical Engineering Students (MEENSTUD) site which is located inside of the Moodle platform. This enables us to seamlessly capture important data on the advisement process using the RAFT tool. The MEENSTUD site, your RAFT, ME departmental holds on selected courses help your advisor and the department to serve you better by promoting and enforcing proper advisement. Consequently, these tools work together to help you to take courses in the proper sequence and stay on track for graduation.

In order to access the MEENSTUD site, students need to self-enroll in the site. Our ME students can self-enroll at the MEENSTUD site using the following link:

https://moodle38.sus.edu/course/view.php?id=6968

• Enrollment Key: MEEN

The latest version of the RAFT (in editable MS Word format) can be found on the MEENSTUD site to download and complete. Each student MUST submit (upload) to the MEENSTUD site a completed and signed RAFT for the respective semester or term to enable removal of departmental holds for enrollment in selected ME courses. The RAFT must contain the signature of the student and the academic advisor. Again, the MEEDSTUD site is the ONLY location that the ME Office will accept your RAFT submission and subsequently provide your requested overrides. You can find more of the advisement tools and resources at the MEENSTUD site, such as links to ME Curriculum (Degree Requirements Record Form), ME Curriculum Flowchart, etc.

IV.3. Academic Advisement Procedures & Tools – RAFT Form

REGISTRATION ADVISEMENT FORM and TABLE

College of Sciences and Engineering Mechanical Engineering Department

Stu	ıdent's Name:						
SU	Banner ID No.:				Telep	hone No.:	
Εm	nail Address:						
Se	mester [§] :			Cur	rent Da	ate:	
§ Seme	ster means the term for which you	are registering or p	ore-regi	istering.			
Disc	cussion Points:						
		RECOM	ИΕΙ	NDE	D CO	URSES	
CRN	Course Title	Course No.	Sec No.	Cred. Hrs.	Day(s)	Time(s)	Instructor
12345	Example ME Course Title	MEEN 001B	1	3.0	MWF	07:00 – 07:50 AM	Dr. John Doe, Sr.
ALTE	RNATE COURSES:						
	TOTAL HOUR	RS RECOMMEN	DED:		-		
Com	ments:						
cours	: signatures below verify the ses I should take during tration form.						
Stu	dent Signature				P	Academic & Care	er Advisor Signature

IV.4. Academic Advisement Procedures & Tools: 2021-2023 Degree Requirements Records Form

Student's Name	Ca	J					Date of Graduation D:		visor				
Ottadont o Hamo	Last		Firs	t	Mido	lle	·		V1001.				
First Semester					FRE	SHMAN	YEAR				Seco	nd Seme	ste
Course	Dept	No	Cr	Grd	Sem	Yr	Course	Dept	No	Cr	Grd	Sem	Υ
Freshman Engr I	ENGR	120B	2				Freshman Engr II	ENGR	130B	2			
Freshman Composition Calculus I	SENL	101B 211B	3				Freshman Composition	SENL	102B	3			\vdash
General Chemistry I	SCHE	132B	3				Calculus II General Physics I	SMAT	212B 213B	3			\vdash
General Chemistry I Lab	SCHE	132LB	1				General Physics I Lab	SPHY	213LB	1			
Life Science Elec*	SBIO		3				Economics	SECO	211B	3			
Total			16				Total			16			
First Semester					SOPE	IOMOR	E YEAR				Seco	nd Seme	ste
Course	Dept	No	Cr	Grd	Sem	Yr	Course	Dept	No	Cr	Grd	Sem	Y
Statics*	CIEN	224B*	3		23111		Diff Equations for Engr ‡	ENGR	330B	3		23111	_
Calculus III	MATH	364B	4				Dynamics	MEEN	225B	3			
Tech Communications	ENGR	230B	2				Mechanics of Materials	MEEN	227B	3			
General Physics II	SPHY	215B	3				Materials Sci & Engr	MEEN	235B	3			
General Physics II Lab	SPHS	214LB	1				Intro to CADD E. E. Fundamentals	MEEN	252B	2			<u> </u>
Social Science Elect* Total			3 16				Total	ELEN	352B	3 17			
First Semester					JU	<u>NIOR</u> Y					Seco	nd Seme	ste
Course	Dept	No	Cr	Grd	Sem	Yr	Course	Dept	No	Cr	Grd	Sem	Y
Num Methods for Engr	MEEN	221B	3				Thermodynamics II	MEEN	301B	3			▙
Thermodynamics I Fluid Mechanics §	MEEN MEEN	300B 312B	3				Measurements Meahing Design	MEEN	356B 365B	3			⊢
Materials Processing	MEEN	335B	3				Machine Design Matl Sci & Engr Elect	MEEN	300B	3			┢
Mechanics of Machines	MEEN	350B	3				Probability & Statistics	ENGR	320B	2			
Health/PE Activity*			2				History Elective*			3			
Total			17				Total			17			
First Semester					SE	NIOR Y	/EAR				Seco	nd Seme	ster
Course	Dept	No	Cr	Grd	Sem	Yr	Course	Dept	No	Cr	Grd	Sem	Υ
Heat Transfer	MEÉN	442B	3				Engineering Economy	CIEN	310B	3			
ME Senior Design I	MEEN	450B	2				Engr Model & Control †	MEEN	456B	3			
Thermal Science Elect			3				ME Senior Design II	MEEN	451B	2			_
History Elective*			3				Engineering Seminar	ENGR	400B	1			_
Literature Elective**			3				General Tech Elective* Arts Elective*			3			\vdash
Total			14				Total			15			
OTHER REQUIREMENT							APPROVED:						
Course	Dept	No	Cr	Grd	Sem	Yr	Faculty Advisor:						
African American Experience**			3				Date:				_		
Expellence		400B,					Dept. Chair:						
One dead Lancellan	01/1/15	300B,					Dept. Onaii.						
Service Learning	SVLR	200B,	3				Date:						
		100B					Academic Dean:						
Writing Proficiency	ENGL	001B	0										
Dept. Comp Exam	MEEN	000B	0				Date:				_		
CIEN 224 is considered of	nents, other Thermal sore cour	er cours Science se for m	es ma and M echan	y be tak laterials ical eng	en, see the Science ineering:	he catalog & Engineer students.	ing may also count as one o		eral tech	nical	elective	courses.	

Ver.20210625

IV.5. **Academic Advisement Procedures & Tools: 2017-2020 Degree Requirements Records Form**

DEGREE REQUIREMENTS RECORD FORM

	_						HANICAL ENGINEERING						
Student's Name		talog	2017	-2020	Pro		d Date of Graduation _ UID:	Λd	visor:				
Student's Name	Last			First	М	iddle	oib	Au	VISUI.				
							ANVEAD				_		
First Semester							ANYEAR			_		nd Seme	_
Course Freehman Fnar I	Dept ENGR	No 120	Cr	Grd	Sem	Yr	Course	Dept	No 120	Cr	Grd	Sem	Yr
Freshman Engr I Life Science Elec*		120	3				Freshman Engr II	ENGR	130	2			₩
	BIOL ENGL	110	3				Freshman Composition Economics	ENGL ECON	111	3			├
Freshman Composition									224				\vdash
General Chemistry Lec General Chemistry Lab	CHEM	132	3				General Physics I	PHYS	221	3			\vdash
	CHEM	112	_				General Physics I Lab	PHYS	223	_			\vdash
Calculus I	MATH	264	4 16				Calculus II	MATH	265	4 16			\vdash
Total			10				Total			10			
First Semester					SOPH	HOM	RE YEAR				Seco	nd Seme	ester
Course	Dept	No	Cr	Grd	Sem	Yr	Course	Dept	No	Cr	Grd	Sem	Yr
Statics	CIEN	224	3				Dynamics	MEEN	225	3			
Cal III & Diff Eqn Engr	MATH	395	4				Mechanics of Materials	MEEN	227	3			
Social Science Elect*			3				Materials Sci & Engr	MEEN	235	3			
General Physics II	PHYS	222	3				Intro to CADD	MEEN	252	2			
General Physics II Lab	PHYS	224	1				Num Methods for Engr	MEEN	221	3			
Tech Communication	ENGR	230	2				E. E. Fundamentals	ELEN	352	3			\vdash
Total	2.11011		16				Total	LLLIN		17			\vdash
Total							Total				l		
First Semester					JL	INIC	RYEAR				Seco	nd Seme	ester
Course	Dept	No	Cr	Grd	Sem	Υr	Course	Dept	No	Cr	Grd	Sem	Yr
Thermodynamics I	MEEN	300	3				Thermodynamics II	MEEN	301	3			
Engineering Math	ENGR	340	3				Matl Sci & Engr Elective	MEEN		3			\Box
Fluid Mechanics	MEEN	312	3				Machine Design	MEEN	365	3			1
Materials Processing	MEEN	335	3				Measurements	MEEN	356	3			$\overline{}$
Mechanics of Machines	MEEN	350	3				Probability & Statistics	ENGR	320	2			+-
Health/PE Activity*	WILLIA		2				History Elective*	HIST	224	3			-
Total			17				Total	1		17			
					-	·NIIC	VEAD				_		
First Semester							RYEAR					nd Seme	
Course	Dept	No	Cr	Grd	Sem	Yr	Course	Dept	No	Cr	Grd	Sem	Yr
Engineering Seminar	ENGR	400	1				Engineering Economy	CIEN	310	3			
Heat Transfer	MEEN	442	3				ME Senior Design II	MEEN	451	2			
ME Senior Design I	MEEN	450	2				Control & Engr Model	MEEN	456	3			
Thermal Science Elect	MEEN		3				General Tech Elective			3			
History Elective*	HIST		3				Arts Elective*			3			
Literature Elective**	XXXX**		3										
													\sqsubseteq
Total			15				Total			14			
OTHER REQUIREMEN	TS:						APPROVED:						
Course	Dept	No	Cr	Grd	Sem	Yr	Faculty Advisor:						
African American Experience	XXXX**		3				Date:				_		
Service Learning	SVLR	X00	3				Dept. Chair:						
							Date: —				-		
Writing Proficiency	ENGL	001	0				Academic Dean:						
Dept. Comp Exam	MEEN	000	0				Date:				_		
Choose from the General Satisfies both requiremental lotes:													
SPR = Spring. SUM =	Summer	, etc	T = T	RANSI	FER, S	= SUE	STITUTION (indicates a co	urse subs	titution	form	is reau	ired)	
					-, -		,						

IV.6. Academic Advisement Procedures & Tools: 2014-2017 Degree Requirements Records Form

DEGREE REQUIREMENTS RECORD FORM

DEPARTMENT OF MECHANICAL ENGINEERING

2014-2017 Catalog Proposed Date of Graduation _____

					•								
):							UID:	Ad	viso	r:			
Last		First		Mi	ddle								
Semester					FRE	ESH	AN YEAR	5	Second	Semes	ster		
Dept	No	Cr	Gro	S b	em	Yr	Course	Dept	No	Cr	Grd	Sem)
ENGR	120	2					Freshman Engr II	ENGR	130	2			
		3					Freshman Composition	ENGL	111	3			
ENGL	110	3					Economics	ECON	205	3			
CHEM	132	3						PHYS	221	3			
CHEM	112	1					General Physics I Lab	PHYS	223	1			
MATH	264						Calculus II	MATH	265				
		16					Total			16		<u> </u>	
Samastar					SOP	HON	ORF YEAR	c	Second	Samas	etor		
	Nο	Cr	Gro									Sem	١
		_	5.0	- 0	J. / 1						Jiu	56.11	+
													${}^{+}$
100/0111	000												${}^{+}$
PHYS	222												T
													
							_ ·						t
LITOR	200	16					Total	LLLIV	002	17			t
	· I								ı		ı		
			_										
			Gro	S	em	Yr					Grd	Sem)
	_								301				₩
				_			- U						₩
													₩
	_												<u> </u>
MEEN	350							ENGR	320				<u> </u>
					-								₩
<u> </u>		17					Total			17		<u> </u>	
Semester					S	ENI	R YEAR	5	Second	Semes	ster		
Dept	No	Cr	Gro	d S	em	Yr	Course	Dept	No	Cr	Grd	Sem	Υ
	400	1							310				
	442								451				
	450							MEEN	456				
MEEN													
							Arts Elective*			3			
ENGL**		3											
1		15					Total			14			
.1	1			1					I				
				0 1		1 1/							
Dept	No)	Cr	Grd	Sem	Yr	Faculty Advisor:						
ENGL**	20	3	3				Doto:				_		
+	400	100											
SVLR		,	3				Dept. Chair.				_		
ENGL	-		0				Date:						
MEEN	00	0	0								_		
			1			1	Date:						
al Educati													
al Educati ents, other													
	Semester Dept ENGL CHEM CHEM MATH Dept CIEN MATH PHYS PHYS ENGR MEEN MEEN MEEN MEEN MEEN MEEN MEEN MEE	Dept	Dept	Dept	Dept	Dept	Dept	Cast	Dept	Dept	Dept	Cast	Dept

IV.7. Academic Advisement Procedures & Tools: 2010-2014 Degree Requirements Records Form

DEGREE REQUIREMENTS RECORD FORM

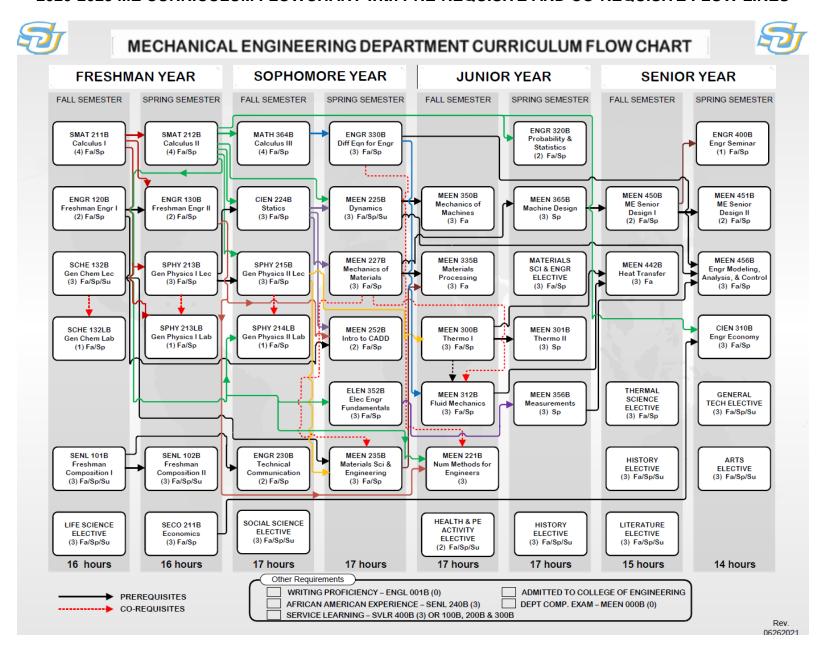
DEPARTMENT OF MECHANICAL ENGINEERING

No 120 110 132 112 264	Firs Cr 2 3 3 3 1 4	Grd	Mic	ldle	SHMAN YEAR Course Freshman Engr II Freshman Composition	Adviso Dept ENGR ENGL	No 130 111	Cr 2	cond Se	emester Sem	Yr
No 120 110 132 112	Cr 2 3 3 3 1			FR	Course Freshman Engr II	ENGR	130	Cr 2			Vr
120 110 132 112	2 3 3 3 1	Grd	Sem		Course Freshman Engr II	ENGR	130	Cr 2			Vr
120 110 132 112	2 3 3 3 1	Grd	Sem	Yr	Freshman Engr II	ENGR	130	2	Grd	Sem	∨ r
110 132 112	3 3 3 1										_''
132 112	3 3 1				L Freshman Composition	1 FN(-1					
132 112	3				·			3			
112	1				Economics	ECON	205	3			
					General Physics	PHYS	221	3			
264	4				General Physics Lab	PHYS	223	1			
	4.0				Calculus II	MATH	265	4			
	16				Total			16			
			SOI	РНОМ	RE YEAR		Sec	cond S	emeste	r	
No	Cr	Grd	Sem	Yr	Course	Dept	No	Cr	Grd	Sem	Yr
222	3				Num Methods for Engr	MEĖN	221	3			
224	1				Dynamics	MEEN	225	3			
224	3				Mechanics of Materials	MEEN	227	3			
230	2					MEEN	235				
395	4					MEEN					
	3				E. E. Fundamentals	ELEN	352	3			
	16				Total			17			
				шыно	VEAD		200	oond C	omosto		
No	Cr	Grd				Dept					Yr
312	3				Prob. & Statistics	ENGR	320				
335	3				Matl Sci & Engr Elect	MEEN	XXX	3			
340	3				Measurements	MEEN	356	3			
350					Machine Design	MEEN	365				
	2				History Elective**			3			
	17				Total			17			
				SENIO	VEAD		Cod	d C	omooto		
Nia	C-	C = 4				Dant					\/-
		Gra	Sem	11					Gra	Sem	Yr
				+							
				+							
						MEEN	456				
111											
202					Arts Elective***			3			-
203	3										-
	15				Total			14			
				1		•	ı			I.	
NI-		To: 14	2	1/-	APPROVED:						
NO		Ur (sra Se	m Yr	Faculty Advisor:						
203		3			Date:				_		
		3			Dept. Chair:						
		+	-		Date:				-		
001		0			Academic Dean:						
000		0			Date:				_		
	No 300 312 335 340 350 No 400 442 450 YYY 203 No 203 400 or 200, & 001	No Cr 300 3 312 3 335 3 340 3 350 3 2 177 No Cr 400 1 442 3 450 2 YYY 3 3 203 3 3 15 15	No	230	SENIOR SENIOR SENIOR SENIOR SENIOR SENIOR Sem Yr SENIOR Sem Yr SENIOR Sem Sem	Materials Sci & Engr Intro to CADD E. E. Fundamentals Total	Materials Sci & Engr MEEN	Materials Sci & Engr MEEN 235	Materials Sci & Engr MEEN 235 3	Materials Sci & Engr MEEN 235 3	Materials Sci & Engr

IV.8. Academic Advisement Procedures & Tools: ME Curriculum Flowchart – Style I 2020-2023 ME CURRICULUM PREREQUISITE (*PR*) AND COREQUISITE (*CR*) FLOW CHART

Freshma	n Year	Sop	homore	e Year	•	Junior \	ear	`	,	Senior Y	ear	
Fall Semester	Spring Semester	Fall Semes		Spring Semester		Fall Semester		ring nester		Fall Semester	Spring Semester	
Freshman Engr I ENGR 120 (2)	Fresh Engr II ENGR 130 (2) PR ENGR 120 & MATH 264	Static CIEN 22 PR MATH PHYS 22	24 (3) H 265 &	Dynamics MEEN 225 (3) PR CIEN 224 & MATH 265		Thermo I MEEN 300 (3) PR PHYS 222	MEEN	ermo II N 301 (3) EEN 300		Engr Seminar ENGR 400 (1) PR MEEN 450	Engr Economy CIEN 310 (3) PR ECON 205 & MATH 265	
Calculus I MATH 264 (4) PR MATH 135 & 140 or MATH160	Economics ECON 205 (3)	Cal III & D MATH 30 PR MAT	95 (4)	Mech of Materials MEEN 227 (3) PR CIEN 224		Engr Math ENGR 340 (3) PR MATH 395	Ele	ci & Engr ective I XXX (3)		Heat Transfer MEEN 442 (3) PR MEEN 300 & MEEN 312	ME Sr Design II MEEN 452 (2) PR MEEN 450	
Gen Chem Lec CHEM 132 (3) PR MATH 135	Calculus II MATH 265 (4) PR MATH 264	Gen. Ph PHYS 22 PR MATH PHYS 22	22 (3) H 265 &	Mat Sc & Engr MEEN 235 (3) PR CHEM 132 & PHYS 222		Fluid Mechanics MEEN 312 (3) PR ENGR 395 R MEEN 227, 300	MEEN	es Design N 365 (3) EEN 227		ME Sr Design I ELEN 450 (2) PR MEEN 365	Engr Modeling, Analysis & Control MEEN 456 (3) PR MEEN 225, 356 & ENGR 340	
Gen Chem Lab CHEM 112 (1) PR/CR CHEM 132	Fresh Comp II ENGL 111 (3) PR ENGL 110	Gen. Physi PHYS 22 PR MATE PHYS 22	24 (1) TH 265,	Intro to CADD MEEN 252 (2) PR ENGR 120, 130 & CIEN 224	Ma	MEEN 335 (3) PR MEEN 227 MEEN 235	MEEN	urements N 356 (3) LEN 352		Thermal Science Elective MEEN YYY (3)	General Tech Elective MEEN ZZZ (3)	
Fresh Comp I ENGL 110 (3)	Gen Physics I PHYS 221 (3) PR MATH 264	Social So Electi (3)	ive	Num Methods Engr MEEN 221 (3) PR ENGR 130 & MATH 265; CR MATH 395		Mech of Machines MEEN 350 (3) PR MEEN 225	ENGF	Statistics R 320 (2) ATH 265		History Elective HIST ZZZ (3)	Arts Elective (3)	
Life Science Elective (3)	Gen Phys I Lab PHYS 223 (1) CR PHYS 221	Technical ENGR 2:	230 (2) GL 110	EE Fundamental ELEN 352 (3) PR MATH 265		Health & PE (2)	HIST	y Elective YYY (3)		Literature Elective (3)		
16 hrs	16 hrs	16 h	nrs	17 hrs		17 hrs	17	hrs		15 hrs	14 hrs	
Color Codes:	Math & Science Requirements: 27 C		Other Electi	ve Requirements: 29 Cr H		Engineering Requirements:				tal Credit Hours irements: 128 Cr H		

IV.9. Academic Advisement Procedures & Tools: ME Curriculum Flowchart – Style II 2020-2023 ME CURRICULUM FLOWCHART with PRE-REQUISITE AND CO-REQUISITE FLOW LINES



IV.10. Academic Advisement Procedures & Tools: Course Prerequisites and Corequisites

Table 3. Mechanical Engineering Course Prerequisites (and Corequisites if necessary)

Course ID	Course Title	Prerequisite(s); Corequisite(s)
ENGR 120B	Freshman Engineering I	NONE
SMAT 211B (MATH 264)	Calculus I	SMAT 121B (MATH 135) and SMAT 121B (MATH 140), or SMAT 121B (MATH 160) or Math Placement Score
SENL 101B (ENGL 110)	Freshman Composition I	NONE
See Elective List	Life Science Elective	See Course(s) for Requirements
SCHE 132B (CHEM 132)	General Chem Lecture	High school chemistry and algebra or SMAT 121B (MATH 135)
SCHE 132LB (CHEM 112)	General Chem Lab	Prerequisite or Corequisite: SCHE 132B (CHEM 132)
ENGR 130B	Freshman Engineering II	ENGR 120B and SMAT 211B (MATH 264)
SMAT 212B (MATH 265)	Calculus II	SMAT 211B (MATH 264)
SENL 102B (ENGL 111)	Freshman Composition II	SENL 101B (ENGL 110)
SPHY 213B/213LB (PHYS 221/223)	General Physics I Lecture & Lab	SMAT 211B (MATH 264)
SECO 211B (ECON 205)	Principles of Economics	NONE
CIEN 224B	Statics	SMAT 212B (MATH 265), SPHY 213B/213LB (PHYS 221/223)
ENGR 230B	Technical Communications	SENL 101B (ENGL 110)
SPHY 215B/214LB (PHYS 222/224)	General Physics II Lecture & Lab	SMAT 212B (MATH 265), SPHY 213B/213LB (PHYS 221/223)
MATH 364B	Calculus III	SMAT 212B (MATH 265)
ENGR 330B	Differential Equations for Engineers	MATH 364B
MATH 370B	Ordinary Differential Equations	MATH 364B
MATH 395	Cal III & Diff Eqns for Engr Majors	SMAT 212B (MATH 265) or Consent of Math Department
See Elective List	Social Science Elective	See Course(s) for Requirements
MEEN 221B	Numerical Methods for Engineering	ENGR 130B and SMAT 212B (MATH 265); Corequisite: ENGR 330B or MATH 370B (MATH 395)
MEEN 225B	Dynamics	CIEN 224B and SMAT 212B (MATH 265)
MEEN 227B	Mechanics of Materials	CIEN 224B
MEEN 235B	Materials Science & Engineering	SCHE 132B (CHEM 132) and SPHY 215B (PHYS 222)
MEEN 252B	Introduction to CADD	ENGR 120B, ENGR 130B, and CIEN 224B
ELEN 352B	Electrical Engineering Fundamentals	SMAT 212B (MATH 265)
MEEN 300B	Thermodynamics I	SPHY 215B (PHYS 222)
MEEN 312B	Fluid Mechanics	ENGR 330B or MATH 370B (MATH 395); Corequisites: MEEN 227B and MEEN 300B
MEEN 335B	Materials Processing	MEEN 227B and MEEN 235B
ENGR 340B	Engineering Mathematics	ENGR 330B or MATH 370B (MATH 395B)
MEEN 350B	Mechanics of Machines	MEEN 225B
See Elective List	Health/PE Activity	See Course(s) for Requirements
MEEN 301B	Thermodynamics II	MEEN 300B
ENGR 320B	Probability & Statistics	SMAT 212B
See ME Electives List	Materials Sci & Engr Elective	See Course(s) for Requirements
MEEN 356B	Measurements	ELEN 352B
MEEN 365B	Machine Design	MEEN 227B
HIST	History Elective	See Course(s) for Requirements
ENGR 400B	Engineering Seminar	MEEN 450B
MEEN 442B	Heat Transfer	MEEN 300B and MEEN 312B
MEEN 450B	ME Senior Design I	MEEN 365B
See ME Electives List	Thermal Science Elective	See Course(s) for Requirements
HIST	History Elective	See Course(s) for Requirements
See Elective List	Literature Elective	See Course(s) for Requirements
CIEN 310B	Engineering Economy	SECO 211B (ECON 205) and SMAT 212B (MATH 265)
MEEN 451B	ME Senior Design II	MEEN 450B
MEEN 456B	Engineering Modeling, Analysis & Control	MEEN 225B, ENGR 340B, and MEEN 356B
See ME Elective List	General Technical Elective	See Course(s) for Requirements
See Elective List	Arts Elective	See Course(s) for Requirements

V. Degree Requirements

The Bachelor of Science Degree in Mechanical Engineering (BSME) is awarded to students who complete ALL of the requirements of the department as stated below:

V.1. General Education Requirements

All students entering the ME Department must complete a general education component as specified in the University's Catalog, which is presented below. Because of the 2019/2020 upgrading of the university's registration system and consolidation of course codes and numbers at SUBR, SUNO, and SUSLA, a compressed conversion table has been created to aid in identifying the old and new course numbers. This <u>Conversion Table</u> is provided on the <u>Undergraduate Program</u> page of the ME web site.

- 1. At least nine (9) hours of course work in the **Humanities** are required. Six (6) of those hours must be **History** courses and three (3) of those hours must be in literature. The six (3) hours of history may be selected from the following courses: SHIS 111B (HIST 114), SHIS 112B (HIST 115), SHIS 230B (HIST 230), HIST 311B*, HIST 410B*, and HIST 463B. The three (3) hours in **Literature** must be taken from SENL 220B (ENGL 201), SENL 240B* (ENGL 203*), ENGL 204B, or ENGL 205B.
- Three (3) hours of course work are required in the Arts and are to be taken from among the following courses: Fine Arts [SFIA 101B (ARTS 200), SFIA 210B (ARTS 210), ARTS 211B, SFIA 222B (ARTS 330), and ARTS 440B*]; Music [MUSC 200B, MUSC 250B, MUSC 251B, MUSC 352B*, MUSC 353B*]; Speech and Theater (SPTH 360B).
- 3. Six (6) hours of course work are required in the Social Sciences area of which three (3) hours must be either Economics [SECO 211B (ECON 205) or SECO 221B (ECON 200)]. The remaining course must be selected from among the following series of courses: Economics [SECO 222B (ECON 210), ECON 370B]; Geography [GEOG 210B, GEOG 221B]; Political Science [SPOL 201B (POLS 200), SPOL 211B (POLS 210), POLS 320B, POLS 402B]; Sociology [SSOC 201B (SOCL 210), SOCL 324B, SOCL 448B]; and Psychology [SPSY 201B (PSYC 210), PSYC 315B, PSYC 350].
- 4. Fifteen (15) hours of course work are required in the Life (Natural) Science area, which include the Biological and Physical Sciences, with a laboratory experience. Eight (8) hours must be taken in a two-semester sequence of Physics courses [SPHY 213B/213LB (PHYS 221/223) and SPHY 215B/214LB (PHYS 222/224)], and four (4) hours must be taken in Chemistry courses [SCHE 132B (CHEM 132) and SCHE 132LB (CHEM 112)]. Three (3) hours of life science course work are required and may be selected from the following Biology courses: SBIO 101B (BIOL 104) or SBIO 102B (BIOL 105).
- Two (2) hours of course work are required in Physical Education or Health and are to be taken from among the following series of courses: Physical Education (PHED 100B-250B) or Health (HLTH 110B-365B).
- * These courses can be taken to simultaneously satisfy the indicated ME elective requirements as well as the University's African-American Experience requirement.

V.2. CORE Mathematics and Science Requirements

A grade of "C" or better is required in the following mathematics and science CORE courses:

New (Old) Course No.	Credit Hour
SMAT 211B (MATH 264)	4
SMAT 221B (MATH 265)	4
MATH 364B (MATH 364)	4
ENGR 330B	3
[or MATH 370B (MATH 37	0)] 4
MATH 395B (MATH 395)	4
SPHY 213B/213LB (PHYS 221)	/223) 3 / 1
SPHY 215B/214LB (PHYS 222)	/224) 3/1
SCHE 132B (CHEM 132)	3
SCHE 132LB (CHEM 112)	1
	SMAT 211B (MATH 264) SMAT 221B (MATH 265) MATH 364B (MATH 364) ENGR 330B [or MATH 370B (MATH 37) MATH 395B (MATH 395) SPHY 213B/213LB (PHYS 221) SPHY 215B/214LB (PHYS 222) SCHE 132B (CHEM 132)

V.3. Departmental Course Requirements

<u>All</u> of the required courses outlined in the curriculum sheet designated by the prefixes <u>MEEN</u> and <u>ENGR</u> are considered to be CORE courses for the mechanical engineering majors and a grade of "C" or better is required. The CIEN 224B (Statics) course is also considered to be a part of the CORE course list.

V.4. Other University and Department Requirements

- 1. Complete the Mechanical Engineering (ME) curriculum requirements with a minimum overall grade point average of 2.00 out of 4.00. The total credit hours required for graduation is 128 credit hours, which excludes remedial and repeated courses.
- 2. Pass the Writing Proficiency Examination (WPE) before applying for graduation. In actuality, the WPE must be taken before a student is admitted to the College of Engineering. Students are strongly encouraged to take this examination as they complete the SENL 102B (ENGL 111) (Freshman Composition II) course. The course is administered by the English Department, and the student MUST ENROLL in the course on Banner. The WPE is listed as SENL 001B (ENGL 001) in the schedule of courses. The University Writing and Communication Center Laboratory located in W. W. Stewart Hall, Room 107 as a resource to prepare students to pass the Examination. For more details on the WPE, visit the web link: www.subr.edu/page/5142 or www.subr.edu/uwcc.
- 3. Pass the Departmental Comprehensive Examination (DCE). The course is administrated by Mechanical Engineering Department, and the student enrolls in the course through a registration link provided by the course administrator. MUST ENROLL in the course on Banner. It is listed as MEEN 000B in the schedule of courses. The Departmental Comprehensive Examination is a part of the Engineering Seminar (ENGR 400B) course activity.

4. Complete the University mandated African-American Experience. Courses that satisfy the African-American Experience requirement include ARTS 440B; SENL 240B* (ENGL 203*), ENGL 313B, ENGL 407B, ENGL 413B, ENGL 415B, and ENGL 485B; HIST 311*, HIST 399B, HIST 401B, HIST 419B, HIST 486B, HIST 496B, and HIST 497B; MUSC 243B, MUSC 352B, and MUSC 353B*; HUMN 366B and 403B; MCOM 331B; PHIL 426B; SOCW 250B and SOCW 450B; SPTH 399B. See the current university catalog for additional details.

Waivers: Students who were first-time freshmen at any post-secondary institution **before** August 1, 1991.

5. Complete the University mandated Service Learning (Community Service) Requirement. Students are required to complete a minimum of 60 clock hours of community service as one of the requirements for graduation from SUBR. Service Learning (SVLR) courses are: SVLR 100B, 200B, and 300B (which are each a 1 semester credit hour course); and SVLR 400B (which is 3 semester credit hour course). A total of three semester hours of credit is required.

Wavers:

- a. Students who were first-time freshmen at any post-secondary institution **before** August 1, 1993;
- b. International Students;
- c. Those students **25 years or older** who completed high school or who earned high school equivalency seven or more years prior to admission;
- d. Any person with certifiable disability of such a nature that community service projects would jeopardize the welfare of the parties involved. In such a case, the disability must be on file in the Office of the Registrar.

V.5. Technical Elective Requirements

Nine (9) hours of technical elective may be taken from any of the following courses prior to graduation. The 2020 to 2024 Schedule of Course Offerings of these electives and other ME courses is provided on the Undergraduate Program page of the ME web site and in Table 5.

Table 4. ME Technical Elective Groups*

Materials Science & Engineering Elective Group

COURSE	COURSE NO.	CR. HRS.
Composite Materials	MEEN 336B	3
Intro to Finite Elements	MEEN 430B	3
Engineering Design: Materials & Manufacturing	MEEN 462B	3

Thermal Science Electives Group

COURSE	COURSE NO.	CR. HRS.
Fluid Dynamics	MEEN 313B	3
Thermal Environmental Engineering	MEEN 421B	3
Thermal System Analysis	MEEN 482B	3

General Technical Elective Group

COURSE	COURSE NO.	CR. HRS.
Fracture Mechanics	MEEN 338B	3
Mechanical Vibrations	MEEN 343B	3
Mechatronics	MEEN/ELEN 464B	3
Topics in Mechanical Engineering	MEEN 467B-468B	3
Senior Projects	MEEN 497B-498B	3
Engineering Practice	ENGR 499B	3
Principles of Management	MGMT 300B	3

*Table 4 Notes:

- a. The courses listed under Thermal Science Elective, and Materials Science and Engineering Elective may also count as one of the General Technical elective courses.
- b. At least one technical elective course is offered every semester.
- c. A grade "C" or better is required for technical elective courses.

V.6. Transfer Credits

Transfer courses can be substituted or used to satisfy the requirements for engineering courses if, and only if:

- The course contents, rigor of presentation, and prerequisites are equivalent, and
- Transfer credits come from engineering programs that are accredited by EAC/ABET.

V.7. Residency Requirement

All ME students must complete 30 hours of the last 36 hours in residence at Southern.

Table 5. ME Four-Year Course Schedule Fall 2020 to Spring 2024

ADD/Subject	Course Number	Course Name	Fall 2020	Spring 2021	Summer 2021	Fall 2021	Spring 2022	Summer 2022	Fall 2022	Spring 2023	Summer 2023	Fall 2023	Spring 2024
ENGR	120B	Freshman Engineering I	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ENGR	230B	Technical Communications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MEEN	000B	Dept comprehensive	✓	✓	If needed	✓	✓	If needed	✓	✓	If needed	✓	✓
MEEN	221B	Numerical Method for Engr	✓	✓			✓			✓			✓
MEEN	225B	Dynamics	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MEEN	227B	Mechanics of Materials	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MEEN	229B	Dynamics & Statics for EE Majors		✓			✓			✓			✓
MEEN	235B	Material Science & Engineering	✓	✓		✓	✓		✓	✓		✓	✓
MEEN	252B	Introduction to Cadd	✓	✓		✓	✓		✓	✓		✓	✓
MEEN	300B	Thermodynamics I	✓	✓		✓	✓		✓	✓		✓	✓
MEEN	301B	Thermodynamics II		✓			✓			✓			✓
MEEN	312B	Fluid Mechanics	✓	✓		✓	✓		✓	✓		✓	✓
MEEN	335B	Materials Processing	✓			✓			✓			✓	
MEEN	350B	Mechanics of Machines	✓			✓			✓			✓	
MEEN	356B	Measurements		✓			✓			✓			✓
MEEN	365B	Machine Design		✓			✓			✓			✓
MEEN	442B	Heat Transfer	✓			✓			✓			✓	
MEEN	450B	Mech Eng Senior Design I	✓	✓		✓	✓		✓	✓		✓	✓
MEEN	451B	Mech Eng Senior Design II	✓	✓		✓	✓		✓	✓		✓	✓
MEEN	456B	Engr Modeling, Analysis, and Control		✓			✓			✓			✓

Technical Electives: Mechanical Engineering Undergraduates must take at least three hours from the three types of technical elective courses shown below prior to graduation for a total of 9 hours:

Materials Scien	ce & Engine	eering Technical Electives											
MEEN	336B	Composite Materials	✓			✓			✓			✓	
MEEN	337B	Engineering Materials & Selection											
MEEN	430B*	Intro to Finite Elements		✓		·	✓			✓			✓
MEEN	460B	Mechanical Energy Systems											
MEEN	482B	Thermal System Analysis											
Thermal Science	Thermal Science Technical Electives												
MEEN	313B	Fluid dynamics	✓			✓			✓			✓	
MEEN	421B*	Thermal Environmental Engr (HVAC II)				✓			✓			✓	
MEEN	462B	Engr Design: Materials & Manufacturing		✓			✓			✓			✓
General Techni	cal Elective	s											
MEEN	338B	Fracture Mechanics					✓						✓
MEEN	439B	Intermediate Manufacturing Processes											
MEEN	343B	Mechanical Vibration	✓						✓				
MEEN	464B	Mechatronics											
MEEN	467B	Topics in Mechanical Engineering	Any semester	r as needed									√
MEEN	468B	Topics in Mechanical Engineering	Any semester	r as needed		·							
MEEN	471B	Computer-Integrated Manufacturing											
MEEN	497B	Senior Projects			If needed			If needed			If needed		

VI. Graduation Checkout Procedures

Students must be approved for graduation by their academic advisors, departmental chairman, academic dean, and the Office of the Registrar. The process to become a Candidate for Graduation begins in the semester prior to that in which the student is scheduled to graduate. These checkout procedures to be followed by prospective ME graduating seniors include:

- 1. Submittal of an Application for Graduation: Deadlines for a student's academic advisor to receive his/her application for graduation are:
 - Spring Commencement Third week of August
 - Summer Commencement Third week of January
 - Fall Commencement Third week of March
- 2. Validate Earned Curriculum Credits: The prospective graduate, along with his/her academic advisor, must review the Degree Requirements Record Form reflecting the ME curriculum in force for the SUBR catalog selected for graduation checkout. His/her latest transcript is to be consulted to certify what if any graduation requirements still remain. If all remaining graduation requirements can be satisfied within the next semester, the academic advisor should sign the Degree Requirements Record Form. The completed form should be inserted into the prospective graduate's application packet.
- 3. Fill-out the forms which are in the degree candidate's graduation application. Some of these forms include:
 - i. Candidate for the Bachelor's Degree Official Check-Out Form The prospective graduate should list on this form all courses that are currently in progress and any additional courses required to complete the degree requirements. The completed form should be inserted into the prospective graduate's application packet.
 - ii. Graduation Application Data Sheet The prospective graduate should fill-out this sheet with the required personal information. The completed form should be inserted into the prospective graduate's application packet.
 - iii. Any necessary Request for Course Substitution Forms It is necessary to complete and sign one of these forms for each course to be substituted. The completed forms should be inserted into the prospective graduate's application packet.
- 4. Submission of Application Packet to Department Chair: The student should then submit the application packet, containing the signed forms cited above and any other required forms, to the Chair's office for further review and additional signatures.
- 5. Submission of Application Packet to the College Dean (or the Dean's delegate): After the Chair's approval will forward the prospective graduate's application packet to the Dean's Office.

- 6. Submission of Application Packet to Academic Affairs: The Dean of the College of Sciences and Engineering will forward the prospective graduate's application packet to the Academic Affair's Office after affixing his/her approval.
- 7. Fill-out the Graduating Senior Exit Survey: The prospective graduate must complete and submit this online survey which is provided by the Dean's Office.

It is the student's responsibility to understand and meet graduation requirements.

VII. Appendix

VII.1. Request for Substitution of Course Form

Southern University-Baton Rouge REQUEST FOR SUBSTITUTION OF COURSE

Please Type

I,		
Student's Name	Student's ID _, request permission to substitute	Department
Classification		Course Number
Descriptive Title of Course	Department	Credit Hours
Semester hours of credit for the req		e Number
		e Number
Descriptive Title of Course	Department	Credit Hours
Please list	all previous substitutions (must be comple	eted)
Please list : Title of Course	all previous substitutions (must be comple Course Number	eted)
	- : -	eted)
Title of Course	Course Number	
Title of Course Advisor:	Course Number	Approved () Disapproved
Advisor:	Course Number Date:()	Approved () Disapproved
Advisor: Department Chair:	Course Number	Approved () Disapproved Approved () Disapproved Approved () Disapproved

VII.2. Degree Candidate's Official Check-Out Sheet

SOUTHERN UNIVERSITY

AND AGRICULTURAL AND MECHANICAL COLLEGE

CANDIDATES FOR THE BACHELOR'S DEGREE OFFICIAL CHECK-OUT SHEET

SU 651									
Name of Student		C	ollege: S	Sciences and Engineering					
Proposed Date of Graduation	on	C	urriculum	Ме	chanical Engineerir	ng			
Degree		C	atalog Iss	ue					
	CC	URSES IN F	PRGRESS	}					
	COURSE		COURSE NUMBE			SEMEST	ER HOURS		
							_		
	ADDITIO	NAL COUR	SES REQ	UIRI	ED				
	COURSE			COURSE NUMBER SEMESTER HOUR					
	ОТ	HER REQUI	REMENT	S	L				
Total Semester Hours Carried	Total Quality Credits	Hours Applica	ble to Degre	е	Military Service Credit	Credi	t Examinations		
DEFICIENT QUALIT			TRANSFE	R STI	JDENTS: Hours & Cred				
Overall: Majo	or Field:	No. of Hours			Quality Credits	Deficience Credits	y Quality		
Signature of Student:				Date:					
	DO NOT WRITE BE	ELOW THIS	LINE (For						
Record Checked by: 1.	Decord Charles desired				Departmental Chairman: 2.				
Academic I	Dean		Office of the Registrar Date				Date		
Approved by: 1.				2.	Ŭ				

VII.3. Graduation Application Data Sheet

SOUTHERNUNIVERSITY

and Agricultural and Mechanical College APPLICATION DATA SHEET

University ID Numbe	er	Area Code ar	nd Telephone Number						
Last Name	First Name	Middle Name	Maiden Name						
Permanent Mailing Address		City and State Sex Male	Zip Code <u>Marital Status</u> Single						
Date of Birth		Male Female	Married Divorced Widowed						
Degree	Major	Minor							
Afr — Am pec affi — Asi exa — His or o — Wh Eu	rica (except those of F nerican Indian or Alas oples of North Americ iliation or community i ian or Pacific Islander ia, the Indian Subcon- iample, China, Japan, spanic: A person of M other Spanish culture nite, non-Hispanic: A prope, North Africa, or	kan Native: A person having a and who maintains cultural recognition. The A person having origins in tinent, or the Pacific Islands. Korea, the Philippine Islands or origin, regardless of race person having origins in any the Middle Fast (except those	origins in any of the original all identification through tribal any of the Far East, Southeast This area includes, for s, and Samoa. In, Central or South American of the original peoples of see of Hispanic origin).						
and ren Sta hol app	d who is in this countrinain indefinitely. Resinates and who have be dien alien registration repropriate racial/ethnic	ry on a temporary basis and dent aliens who are not citize en lawfully admitted for pern ceipt cards -Form 1-551/155	ens or nationals of the United manent residence (and who						

VII.4. Graduating Student Exit Survey

SOUTHERN UNIVERSITY

Mechanical Engineering Department GRADUATING STUDENT EXIT SURVEY

	Semester:	Date:	
	ducational experiences of tho tion as accurately as possible	ose who follow you, and to assist us in re-exam e.	nining our program,
Last Name:		First Name:	M.I.
Permanent Address:			Phone No.:
Current Address:			Phone No.:
BIOGRAPHICAL /ENRO	LLMENT DATA		
1- Sex: 2- Female Male	Race: 3- Citizens Black US White Other	ship: 4- Residence: 5- Current Louisiana 22 o er Other 23-2 30 o 30 o	Age: r under 9 r older
6- While pursuing your	degree, did you:	7- Number of years in attendance at Sout	hern University?
☐ Enrolled at SUBI☐ Transfer from a 2☐ Transfer from an	R to begin college study? 2-year college? lother university?	One Two Thre	
8- Please estimate you	r cumulative GPA upon con	npletion of your degree curriculum.	
3.75-4.00	3.50-3.74 🔲 3.25-3.49	□ 3.00-3.24 □ 2.75-2.99 □ 2.50-2.74	2.00-2.49
9- Level of activity in C	OE student organizations?	during the past academic year?	
11- What are your imme	diate employment plans?		
☐ I plan to work in☐ I plan to continue	a job I recently obtained. e my education before working	☐ I am currently looking for a job g full time. ☐ I have not formulated my empl	
12- If you indicated in related to your majo	question #11 that you curr r or area of study at Southe	rently have or will be starting a new job, to rn?	what extent is it
12-A		12-B	
☐ Directly relate ☐ Somewhat re ☐ Not related		Is the job in Louisiana?	☐ No
Employer		Location	
		ntinue your education, what:	te?
14- A. Did you take the I	FE Exam? Yes	No 14-B. Did you pass? ☐ Yes ☐ No ☐	Results not known.

Page 1 of 3

ASSESSMENT OF SPECIFIC SKILLS, ABILITIES, AND ATTRIBUTES

Please give us feedback on the following skills, abilities and attributes that are generally expected of engineering professionals. Base your responses on your total learning experience as an undergraduate student (i.e., course interactions with faculty and other students, co-op experience, etc.). Please feel free to use the space provided after each list to briefly explain your responses, especially if you feel that your preparation was less than adequate. Use a response scale of 1 through 5 with the following explanations for use when estimating professional development value:

0 =No Response 1 =Not Important 2=Somewhat Important 3=Important 4=Very Important 5=Extremely Important

15- An understanding and ability apply knowledge of general requirements:

	Emphasis 0	Value to Professional Development							
	Too Much	Adequate	Too Little	0	1	2	3	4	5
Computer Science									П
Mathematics									
Physical Sciences									
Humanities & Social Sciences									

16- An understanding and ability to apply knowledge of engineering requirements:

	Emphasis	gram was:	Value to Professional Development:						
	Too Much	Adequate	Too Little	0	1	2	3	4	5
Engr. Science & Mechanics									
Experimental Apparatus									
Electrical Engr. & Electronics									
Engineering Economics									
Computer Aided Design									
Mechanical Systems									
Design Process									
Professional and Ethical Responsibility									

ASSESSMENT OF THE ENVIRONMENT OF LEARNING

Please indicate the level of your satisfaction with each of the following aspects of your experience at Southern University. Feel free to use the space provided after each list to briefly explain your responses, especially if you feel less than satisfied with a particular experience.

17- Quality of instruction and support for learning by the faculty in:

		No Opinion	Not Satisfied	Somewhat Satisfied	Very Satisfied	Extremely Satisfied
	Mathematics & Physical Sciences					
	Humanities & Social Sciences					
	ME Major Course					
	Non-ME Engineering Courses					
10	Equity of Advisement with respect	to:				
10-		·· 🗖				
	Academic Planning	닏		- 4	닏	닏
	Career Planning					<u> </u>
	Graduate Education					
19-E	equity of treatment by:					
	Academic Administrators					
	Faculty & Staff					
	Fellow Students					
			_			
20-	Physical quality of the following fa	cilities:				_
	Computing					
	Classrooms					
	Laboratories					
	Library					

Page 2 of 3

21- ASSESSMENT OF a-k ABET OUTCOMES FOR ENGINEERING PROGRAMS

Please give us feedback on the following skills, abilities and attributes that are expected of you at the time of graduation. Use a response scale of 1 through 5 with the following explanations for use when assessing ABET outcomes.

1 =	=Not Prepared 2=Somewhat Prepared 3= Prepared 4= Well Prep	ared	5= Extre	mely W	ell Prep	ared
	As a graduate of the ME Program, I attained the following outcomes:	1	2	3	4	5
	a. an ability to apply knowledge of mathematics, science, and engineering					
	b. an ability to design and conduct experiments, as well as to analyze and interpret data c. an ability to design a system, component, or process to meet					
	desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety,					
	manufacturability, and sustainability					
	d. an ability to function on multidisciplinary teams					
	e. an ability to identify, formulate, and solve engineering problems					
	f. an understanding of professional and ethical responsibility					
	g. an ability to communicate effectively					
	h. the broad education necessary to understand the impact of					
	engineering solutions in a global, economic, environmental, and societal context					
	 i. a recognition of the need for, and an ability to engage in life-long learning 		П			
	j. a knowledge of contemporary issues		_	_		_
	k. an ability to use the techniques, skills, and modern engineering					
	tools necessary for engineering practice.					
22	- ASSESSMENT OF MECHANICAL ENGINEERING PROGRAM OUTCOMES					
gra	ease give us feedback on the following skills, abilities and attributes that aduation. Use a response scale of 1 through 5 with the following explana ogram outcomes.					
1 =	=Not Prepared 2=Somewhat Prepared 3= Prepared 4= Well Prep	ared	5= Extre	mely W	ell Prep	ared
	As a graduate of the ME Program, I can demonstrate to have the ability			_		_
	to:	1	2	3	4	5
	a. apply principles of engineering, basic science, and mathematics (including multivariate calculus and differential equations) to model, analyze, design, and realize physical					
	systems, components or processes.					
	b. work professionally in both thermal and mechanical systems			12-2		_
	areas.					

Page 3 of 3