



**SOUTHERN
UNIVERSITY**

AND AGRICULTURAL & MECHANICAL COLLEGE

ADVISEMENT & GRADUATION CHECKOUT PROCEDURES

for the

**MECHANICAL ENGINEERING
DEPARTMENT**

College of Sciences and Engineering

2020-2023 Catalog

www.subr.edu/ME

Revised: November 14, 2022

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.	ME Advise-Advisee Conference Record Form	10
IV.5.	Academic Advisement Procedures & Tools: 2020-2023 Degree Requirements Records Form	11
IV.6.	Academic Advisement Procedures & Tools: 2017-2020 Degree Requirements Records Form	12
IV.7.	Academic Advisement Procedures & Tools: 2014-2017 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:

1. 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 (www.subr.edu/UniversityCollege) 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
A, B	Dr. Stephen Akwaboa	Stephen_Akwaboa@subr.edu (225) 771-2709	Pinch 366
C	Dr. Stephen Akwaboa	Stephen_Akwaboa@subr.edu (225) 771-2709 or 771-3580	Pinch 366 Pinch 334
D	Dr. Fareed Dawan	Fareed_Dawan@subr.edu (225) 771-2207	Pinch 351
E, F, G	Dr. Dwayne Jerro	Dwayne_Jerro@subr.edu (225) 771-3580	Pinch 334
H, I, J, K,	Dr. Brian Warren	Brian_Warren@subr.edu (865) 368-7913	Pinch 353
L, M, N, O, P	Dr. Brian Warren	Brian_Warren@subr.edu (865) 368-7913	Pinch 353
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

IV. Academic Advisement Procedures

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. To keep a record of these interactions, a **ME Advisee-Advisor Conference Record Form** has been created and should be maintained throughout the student's matriculation through the ME program.
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.

IV. Academic Advisement Procedures

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.sus.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.

IV. Academic Advisement Procedures

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://moodle.sus.edu/course/view.php?id=11300>
- 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 MEENSTUD 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

Student's Name: _____

SU Banner ID No.: _____ Telephone No.: _____

Email Address: _____

Semester[§]: _____ Current Date: _____

[§]Semester means the term for which you are registering or pre-registering.

Discussion Points:

RECOMMENDED COURSES

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.

ALTERNATE COURSES:

TOTAL HOURS RECOMMENDED: _____

Comments:

Note:

The signatures below verify that I have had an advisement conference with my faculty advisor concerning courses I should take during the semester indicated. My advisor has approved the courses listed on the registration form.

 Student Signature

 Academic & Career Advisor Signature

IV.5. Academic Advisement Procedures & Tools: 2020-2023 Degree Requirements Records Form

DEGREE REQUIREMENTS RECORD FORM

DEPARTMENT OF MECHANICAL ENGINEERING

Catalog 2020-2023 Proposed Date of Graduation _____

Student's Name: _____ SUID: _____ Advisor: _____

Last First Middle

FRESHMAN YEAR

First Semester							Second Semester						
Course	Dept	No	Cr	Grd	Sem	Yr	Course	Dept	No	Cr	Grd	Sem	Yr
Freshman Engr I	ENGR	120B	2				Freshman Engr II	ENGR	130B	2			
Freshman Composition	SENL	101B	3				Freshman Composition	SENL	102B	3			
Calculus I	SMAT	211B	4				Calculus II	SMAT	212B	4			
General Chemistry I	SCHE	132B	3				General Physics I	SPHY	213B	3			
General Chemistry I Lab	SCHE	132LB	1				General Physics I Lab	SPHY	213LB	1			
Life Science Elec*			3				Economics	SECO	211B	3			
Total			16				Total			16			

SOPHOMORE YEAR

First Semester							Second Semester						
Course	Dept	No	Cr	Grd	Sem	Yr	Course	Dept	No	Cr	Grd	Sem	Yr
Statics*	CIEN	224B*	3				Diff Equations for Engr ‡	ENGR	330B	3			
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	MEEN	252B	2			
Social Science Elect*			3				E. E. Fundamentals	ELEN	352B	3			
Total			16				Total			17			

JUNIOR YEAR

First Semester							Second Semester						
Course	Dept	No	Cr	Grd	Sem	Yr	Course	Dept	No	Cr	Grd	Sem	Yr
Num Methods for Engr	MEEN	221B	3				Thermodynamics II	MEEN	301B	3			
Thermodynamics I	MEEN	300B	3				Measurements	MEEN	356B	3			
Fluid Mechanics §	MEEN	312B	3				Machine Design	MEEN	365B	3			
Materials Processing	MEEN	335B	3				Matl Sci & Engr Elect			3			
Mechanics of Machines	MEEN	350B	3				Probability & Statistics	ENGR	320B	2			
Health/PE Activity*			2				History Elective*			3			
Total			17				Total			17			

SENIOR YEAR

First Semester							Second Semester						
Course	Dept	No	Cr	Grd	Sem	Yr	Course	Dept	No	Cr	Grd	Sem	Yr
Heat Transfer	MEEN	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#			3			
							Arts Elective*			3			
Total			14				Total			15			

OTHER REQUIREMENTS:

Course	Dept	No	Cr	Grd	Sem	Yr
African American Experience**			3			
Service Learning	SVLR	400B, 300B, 200B, 100B	3			
Writing Proficiency	ENGL	001B	0			
Dept. Comp Exam	MEEN	000B	0			

APPROVED:

Faculty Advisor:	_____
Date:	_____
Dept. Chair:	_____
Date:	_____
Academic Dean:	_____
Date:	_____

- * Choose from the General Education Requirements list, see the catalog
- ** May satisfy both requirements, other courses may be taken, see the catalog
- # The courses listed under Thermal Science and Materials Science & Engineering may also count as one of the general technical elective courses.
- CIEN 224 is considered core course for mechanical engineering students.
- ‡ MATH 370B is acceptable; § - CIEN 321 is acceptable/equivalent; † - ELEN 431 is acceptable/equivalent

Notes:

SPR = Spring, SUM = Summer, etc... T = TRANSFER, S = SUBSTITUTION (indicates a course substitution form is required)

IV.6. Academic Advisement Procedures & Tools: 2017-2020 Degree Requirements Records Form

DEGREE REQUIREMENTS RECORD FORM

DEPARTMENT OF MECHANICAL ENGINEERING
 Catalog 2017-2020 Proposed Date of Graduation _____

Student's Name: _____ SUID: _____ Advisor: _____
 Last First Middle

FRESHMAN YEAR

Course	Dept	No	Cr	Grd	Sem	Yr
Freshman Engr I	ENGR	120	2			
Life Science Elec*	BIOL		3			
Freshman Composition	ENGL	110	3			
General Chemistry Lec	CHEM	132	3			
General Chemistry Lab	CHEM	112	1			
Calculus I	MATH	264	4			
Total			16			

Course	Dept	No	Cr	Grd	Sem	Yr
Freshman Engr II	ENGR	130	2			
Freshman Composition	ENGL	111	3			
Economics	ECON		3			
General Physics I	PHYS	221	3			
General Physics I Lab	PHYS	223	1			
Calculus II	MATH	265	4			
Total			16			

SOPHOMORE YEAR

Course	Dept	No	Cr	Grd	Sem	Yr
Statics	CIEN	224	3			
Cal III & Diff Eqn Engr	MATH	395	4			
Social Science Elect*			3			
General Physics II	PHYS	222	3			
General Physics II Lab	PHYS	224	1			
Tech Communication	ENGR	230	2			
Total			16			

Course	Dept	No	Cr	Grd	Sem	Yr
Dynamics	MEEN	225	3			
Mechanics of Materials	MEEN	227	3			
Materials Sci & Engr	MEEN	235	3			
Intro to CADD	MEEN	252	2			
Num Methods for Engr	MEEN	221	3			
E. E. Fundamentals	ELEN	352	3			
Total			17			

JUNIOR YEAR

Course	Dept	No	Cr	Grd	Sem	Yr
Thermodynamics I	MEEN	300	3			
Engineering Math	ENGR	340	3			
Fluid Mechanics	MEEN	312	3			
Materials Processing	MEEN	335	3			
Mechanics of Machines	MEEN	350	3			
Health/PE Activity*			2			
Total			17			

Course	Dept	No	Cr	Grd	Sem	Yr
Thermodynamics II	MEEN	301	3			
Matl Sci & Engr Elective	MEEN		3			
Machine Design	MEEN	365	3			
Measurements	MEEN	356	3			
Probability & Statistics	ENGR	320	2			
History Elective*	HIST	224	3			
Total			17			

SENIOR YEAR

Course	Dept	No	Cr	Grd	Sem	Yr
Engineering Seminar	ENGR	400	1			
Heat Transfer	MEEN	442	3			
ME Senior Design I	MEEN	450	2			
Thermal Science Elect	MEEN		3			
History Elective*	HIST		3			
Literature Elective**	XXXX**		3			
Total			15			

Course	Dept	No	Cr	Grd	Sem	Yr
Engineering Economy	CIEN	310	3			
ME Senior Design II	MEEN	451	2			
Control & Engr Model	MEEN	456	3			
General Tech Elective			3			
Arts Elective*			3			
Total			14			

OTHER REQUIREMENTS:

Course	Dept	No	Cr	Grd	Sem	Yr
African American Experience	XXXX**		3			
Service Learning	SVLR	X00	3			
Writing Proficiency	ENGL	001	0			
Dept. Comp Exam	MEEN	000	0			

APPROVED:

Faculty Advisor:	_____
Date:	_____
Dept. Chair:	_____
Date:	_____
Academic Dean:	_____
Date:	_____

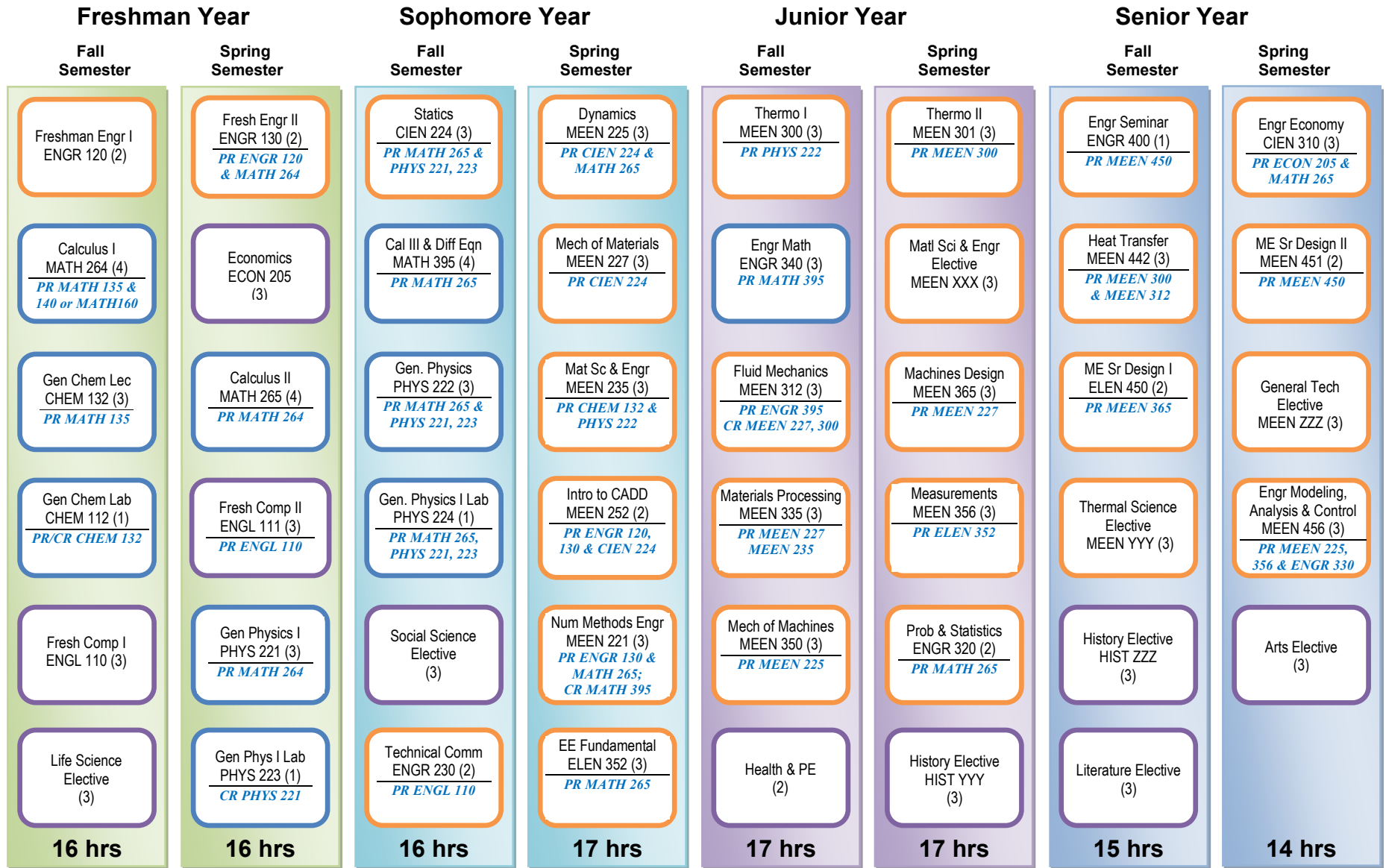
* Choose from the General Education Requirements list, see the catalog
 ** Satisfies both requirements, other courses may be taken, see the catalog

Notes:

SPR = Spring, SUM = Summer, etc... T = TRANSFER, S = SUBSTITUTION (indicates a course substitution form is required)

IV.8. Academic Advisement Procedures & Tools: ME Curriculum Flowchart – Style I

2020-2023 ME CURRICULUM PREREQUISITE (PR) AND COREQUISITE (CR) FLOW CHART



Color

Math & Science
Requirements: 27 Cr H

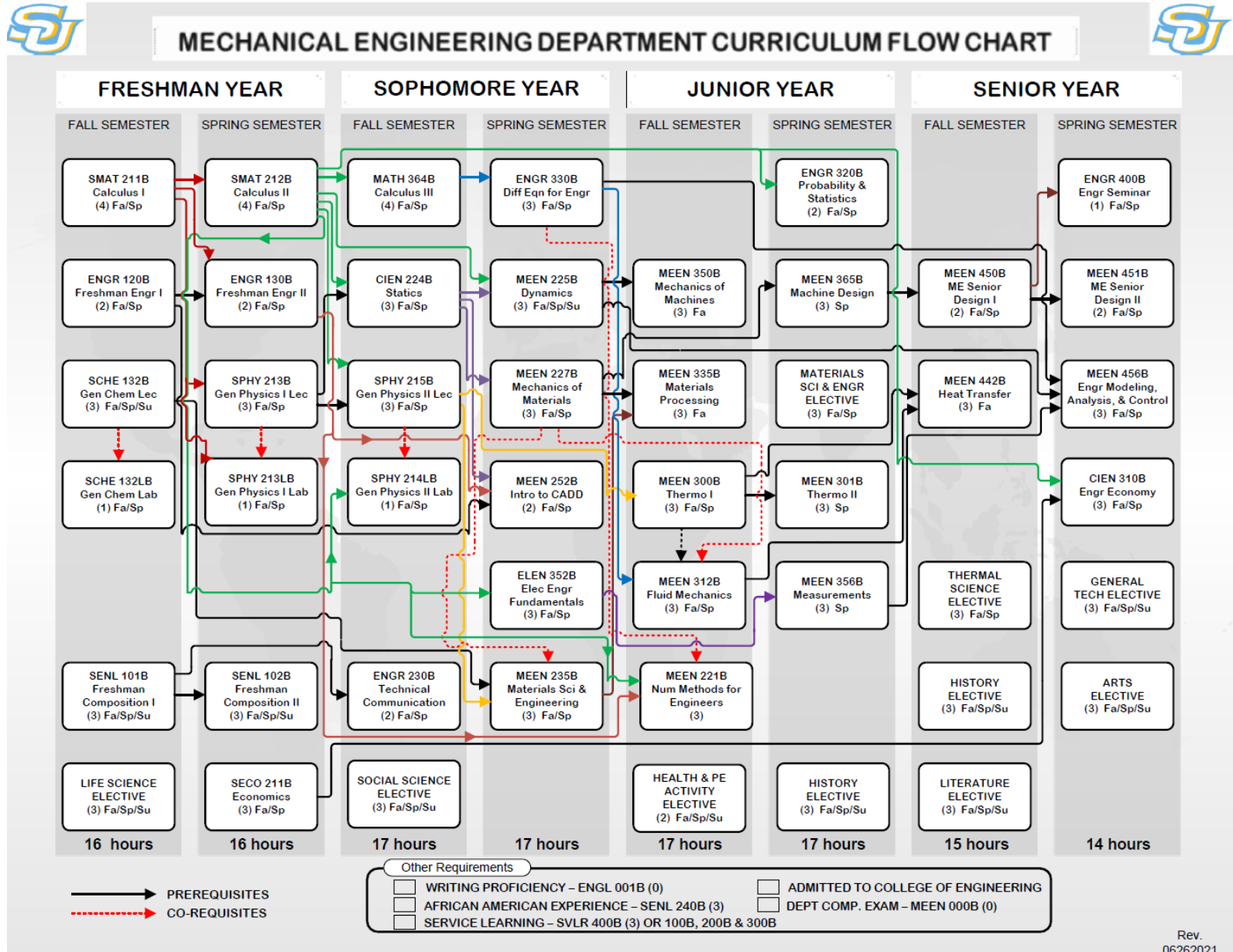
Other Elective Requirements: 29
Cr H

Engineering Major
Requirements: 72 Cr H

Total Credit Hours
Requirements: 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
CIEEN 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	CIEEN 224B and SMAT 212B (MATH 265)
MEEN 227B	Mechanics of Materials	CIEEN 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 CIEEN 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
CIEEN 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 [Conversion Table](#) is provided on the [Undergraduate Program](#) 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.
2. 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).
5. 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).

V. Degree Requirements

* *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:

Course	New (Old) Course No.	Credit Hour
Calculus I	SMAT 211B (MATH 264)	4
Calculus II	SMAT 221B (MATH 265)	4
Calculus III	MATH 364B (MATH 364)	4
Ordinary Differential Equations for Engineers [or Ordinary Differential Equations]	ENGR 330B [or MATH 370B (MATH 370)]	3 4
Calculus III & Differential Equations For Engr Majors	MATH 395B (MATH 395)	4
General Physics Lecture and Lab	SPHY 213B/213LB (PHYS 221/223)	3 / 1
General Physics Lecture and Lab	SPHY 215B/214LB (PHYS 222/224)	3 / 1
General Chemistry Lecture	SCHE 132B (CHEM 132)	3
General Chemistry Lab	SCHE 132LB (CHEM 112)	1

V.3. Departmental Course Requirements

All of the required courses outlined in the curriculum sheet designated by the prefixes **MEEN** and **ENGR** 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 administered 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

V. Degree Requirements

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.

Waivers:

- 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

V. Degree Requirements

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.

V. Degree Requirements

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	✓	✓	<i>If needed</i>	✓	✓	<i>If needed</i>	✓	✓	<i>If needed</i>	✓	✓
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 Science & Engineering 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 Technical Electives													
MEEN	313B	Fluid dynamics	✓			✓			✓			✓	
MEEN	421B*	Thermal Environmental Engr (HVAC II)				✓			✓			✓	
MEEN	462B	Engr Design: Materials & Manufacturing		✓			✓			✓			✓
General Technical Electives													
MEEN	338B	Fracture Mechanics					✓						✓
MEEN	439B	Intermediate Manufacturing Processes											
MEEN	343B	Mechanical Vibration	✓						✓				
MEEN	464B	Mechatronics											
MEEN	467B	Topics in Mechanical Engineering			<i>Any semester as needed...</i>								✓
MEEN	468B	Topics in Mechanical Engineering			<i>Any semester as needed...</i>								
MEEN	471B	Computer-Integrated Manufacturing											
MEEN	497B	Senior Projects			<i>If needed</i>			<i>If needed</i>			<i>If needed</i>		
MEEN	498B	Senior Projects			<i>If needed</i>			<i>If needed</i>			<i>If needed</i>		

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.

VI. Graduation Check-Out Procedures

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 Affairs 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 Department

_____, request permission to substitute _____
Classification Course Number

Descriptive Title of Course Department Credit Hours

Semester hours of credit for the required course _____
Course Number

Descriptive Title of Course Department Credit Hours

Reasons(s) for said request follows: (If request involves a Transfer of Credit, please indicate institution of origin and location. Attach a course description from the university Catalog.)

Please list all previous substitutions (must be completed)	
Title of Course	Course Number

Advisor: _____ Date: _____ () Approved () Disapproved

Department Chair: _____ Date: _____ () Approved () Disapproved

Dean: _____ Date: _____ () Approved () Disapproved

Academic Affairs: _____ Date: _____ () Approved () Disapproved

Registrar: _____ Date: _____ () Approved () Disapproved

Revised 11/2004

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	College: Sciences and Engineering
Proposed Date of Graduation	Curriculum Mechanical Engineering
Degree	Catalog Issue

COURSES IN PROGRESS

COURSE	COURSE NUMBER	SEMESTER HOURS

ADDITIONAL COURSES REQUIRED

COURSE	COURSE NUMBER	SEMESTER HOURS

OTHER REQUIREMENTS

Total Semester Hours Carried	Total Quality Credits	Hours Applicable to Degree	Military Service Credit	Credit Examinations
DEFICIENT QUALITY CREDITS		IF TRANSFER STUDENTS: Hours & Credits Carried at SU		
Overall:	Major Field:	No. of Hours	Quality Credits	Deficiency Quality Credits

Signature of Student:

Date:

DO NOT WRITE BELOW THIS LINE (For Office Use Only)

Record Checked by: 1.	Departmental Chairman:	2.	
Approved by: 1.	Academic Dean	Office of the Registrar	Date
		2.	

VII.3. Graduation Application Data Sheet

S O U T H E R N U N I V E R S I T Y
and Agricultural and Mechanical College
APPLICATION DATA SHEET

 University ID Number

 Area Code and Telephone Number

 Last Name First Name Middle Name Maiden Name

 Permanent Mailing Address City and State Zip Code

 Sex Marital Status

 Date of Birth Male Single

 Female Married

 Divorced

 Widowed

Degree _____ Major _____ Minor _____

Racial/Ethnic Data

- *Black, non-Hispanic: A person having origins in any of the black racial groups of Africa (except those of Hispanic origin).*
- *American Indian or Alaskan Native: A person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition.*
- *Asian or Pacific Islander: A person having origins in any of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Philippine Islands, and Samoa.*
- *Hispanic: A person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race.*
- *White, non-Hispanic: A person having origins in any of the original peoples of Europe, North Africa, or the Middle East (except those of Hispanic origin).*
- *Non-Resident Alien: A person who is not a citizen or national of the United States and who is in this country on a temporary basis and does not have the right to remain indefinitely. Resident aliens who are not citizens or nationals of the United States and who have been lawfully admitted for permanent residence (and who hold alien registration receipt cards -Form 1-551/155) , are to be reported in the appropriate racial/ethnic categories along with United State citizens. Please give your Alien Registration Receipt Card Number*

 Card Number

VII.4. Graduating Student Exit Survey

SOUTHERN UNIVERSITY

**Mechanical Engineering Department
GRADUATING STUDENT EXIT SURVEY**

Semester: _____ **Date:** _____

To further improve the educational experiences of those who follow you, and to assist us in re-examining our program, please answer each question as accurately as possible.

Last Name:	First Name:	M.I.
Permanent Address:		Phone No.:
Current Address:		Phone No.:

BIOGRAPHICAL /ENROLLMENT DATA

1- **Sex:** Female Male

2- **Race:** Black White Other _____

3- **Citizenship:** US Other _____

4- **Residence:** Louisiana Other _____

5- **Current Age:** 22 or under 23-29 30 or older

6- **While pursuing your degree, did you:**

Enrolled at SUBR to begin college study?
 Transfer from a 2-year college?
 Transfer from another university?

7- **Number of years in attendance at Southern University?**

One Two Three
 Four Five Six or more

8- **Please estimate your cumulative GPA upon completion 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 COE student organizations?** High Moderate Low None

10- **Average number of hours employed per week during the past academic year?**

None 1-10 11-20 21-30 31-40

11- **What are your immediate employment plans?**

I plan to work in a job I recently obtained. I am currently looking for a job.
 I plan to continue my education before working full time. I have not formulated my employment plan.

12- **If you indicated in question #11 that you currently have or will be starting a new job, to what extent is it related to your major or area of study at Southern?**

12-A Directly related Somewhat related Not related

12-B Is the job in Louisiana? Yes No

Employer _____ Location _____

13- **If you indicated in question #11 that you will continue your education, what:**

Degree? _____ **University?** _____ **Start Date?** _____

14- **A. Did you take the FE Exam?** Yes No **14- B. Did you pass?** Yes No Results not known.

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 Given in Program was:			Value to Professional Development:					
	Too Much	Adequate	Too Little	0	1	2	3	4	5
Computer Science	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mathematics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical Sciences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Humanities & Social Sciences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

	Emphasis Given in Program was:			Value to Professional Development:					
	Too Much	Adequate	Too Little	0	1	2	3	4	5
Engr. Science & Mechanics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Experimental Apparatus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electrical Engr. & Electronics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Engineering Economics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Computer Aided Design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mechanical Systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Design Process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Professional and Ethical Responsibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Humanities & Social Sciences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ME Major Course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-ME Engineering Courses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18- Equity of Advisement with respect to:

Academic Planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career Planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Graduate Education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19-Equity of treatment by:

Academic Administrators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Faculty & Staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fellow Students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20- Physical quality of the following facilities:

Computing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Classrooms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laboratories	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Library	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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 Prepared 5= Extremely Well Prepared

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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. an ability to design and conduct experiments, as well as to analyze and interpret data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. an ability to function on multidisciplinary teams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. an ability to identify, formulate, and solve engineering problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. an understanding of professional and ethical responsibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. an ability to communicate effectively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. a recognition of the need for, and an ability to engage in life-long learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. a knowledge of contemporary issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

22- ASSESSMENT OF MECHANICAL ENGINEERING PROGRAM OUTCOMES

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 ME Program outcomes.

1 =Not Prepared 2=Somewhat Prepared 3= Prepared 4= Well Prepared 5= Extremely Well Prepared

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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. work professionally in both thermal and mechanical systems areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>