## Mississippi State University Spring 2023 Course List

ASE 6133	Automatic Control	Tues / Thurs	03:30pm - 04:45pm
ASE 6153	Advanced Performance	Mon / Wed / Fri	12:00pm - 12:50pm
ASE 6423	Int Comput Fluid Dyn	Mon / Wed / Fri	09:00am - 09:50am
ASE 6813	Adv Orbital Mechanics	Tues / Thurs	12:30pm - 01:45pm
ASE 8353	Turbulent Flow	Mon / Wed / Fri	08:00am - 08:50am
ASE 8423	Comput Fluid Dyn II	Tues / Thurs	03:30pm - 04:45pm
CE 6433	Foundations	Tues / Thurs	09:30am - 10:45am
CE 6513	Engr. Hydrology	Tues / Thurs	08:00am - 09:15am
CE 6863	Water & Waste Engr.	Mon / Wed	12:30pm - 01:45pm
CE 6993	Prestr Concr Structures	Mon / Wed / Fri	08:00am - 08:50am
CE 8463	Slopes & Embankments	Tues / Thurs	05:00pm - 06:15pm
CE 8563	Groundwater Res Eval	Tues / Thurs	11:00am - 12:15pm
CE 8683	Finite Element Analy	Mon / Wed / Fri	08:00am - 08:50am
CHE 6173	Polymer Science & Technology	Mon / Wed / Fri	12:00pm - 12:50pm
CHE 8011	Chem En Seminar	Fridays	03:00pm - 04:50pm
CHE 8123	Chem Kinetics Dyn	Tues / Thurs	02:00pm - 03:15pm
CHE 8523	Adv Tran Pheno	Tues / Thurs Tuesdays	03:30pm - 04:45pm 06:00pm - 08:50pm
CSE 6173	Cryptography	Tues / Thurs	11:00am - 12:15pm
CSE 6214	Intro to Software Eng	Tues / Thurs	12:30pm - 01:45pm
CSE 6363	Software Reverse Engineering	Tues / Thurs	03:30pm - 04:45pm
CSE 6383	Network Security	Mon / Wed / Fri	11:00am - 11:50am
CSE 6623	Computational Biology	Tues / Thurs	09:30pm - 10:45pm
CSE 6633	Artificial Intell	Mon / Wed	02:00pm - 03:15pm
CSE 6733	Operating Systems I	Tues / Thurs	03:30pm - 04:45pm
CSE 6833	Intro to Algorithms	Mon / Wed	12:30pm - 01:45pm
CSE 8011	Seminar	Mondays	10:00am - 10:50am
CSE 8413	Visualization	Mon / Wed	03:30pm - 04:45pm
CSE 8813	Theory of Computation	Mon / Wed	12:30pm - 01:45pm
CSE 8843	Seg/Parallel Alrthm	Mon / Wed	03:30pm - 04:45pm
ECE 6193	Automotive Engineering	Tues / Thurs	08:00am - 09:15am
ECE 6313	Antennas	Tues / Thurs	08:00am - 09:15am
ECE 6633	Pwer Distrib Systems	Tues / Thurs	11:00am - 12:15pm
ECE 6793	Literate Programming	Tues / Thurs Fridays	09:30am - 10:20am 12:00pm - 01:40pm
ECE 8633	Control of DER Systems	Mon / Wed	02:00pm - 03:15pm
ECE 8683	Power Sys Opt & Control	Tues / Thurs	12:30pm - 01:45pm
ECE 8803	Random Signals & Systems	Mon / Wed / Fri	11:00am - 11:50am

ECE 8833	Computational Intelligence	Tues / Thurs	03:30pm - 04:45pm
ECE 9100	Graduate Seminar	ТВА	ТВА
EM 6123	Intro Finite Element	Mon / Wed / Fri	11:00am - 11:50am
EM 6133	Composite Materials	Mon / Wed / Fri	01:00pm - 01:50pm
EM 8113	Theory Of Cont Media	Mon / Wed / Fri	10:00am - 10:50am
GE 8003	MENG Capstone	ТВА	ТВА
IE 6113	Human Factors Eng	ТВА	ТВА
IE 6533	Project Mgt	ТВА	ТВА
IE 6543	Logistics Engineering	ТВА	ТВА
IE 6613	Eng Statistics I	ТВА	ТВА
IE 6623	Eng Statistics II	ТВА	ТВА
IE 6733	Linear Programming I	ТВА	ТВА
IE 6773	Sys Simulation I	ТВА	ТВА
IE 6933	Information System in IE	ТВА	ТВА
IE 6990	Special Topic In IE	ТВА	ТВА
IE 6990	Special Topic In IE	ТВА	ТВА
IE 8333	Prod Control Sys II	ТВА	ТВА
IE 8733	Decision Theory	ТВА	ТВА
IE 8990	Special Topic In IE	ТВА	ТВА
ME 6193	Automotive Engineering	Tues / Thurs	08:00am - 09:15am
ME 6233	Fundamentals of FEA	Mon / Wed	12:30pm - 01:45pm
ME 6353	Alt Energy Sources	Mon / Wed / Fri	10:00am - 10:50am
ME 6393	Power Generation Systems	Mon / Wed / Fri	11:00am - 11:50am
ME 6833	Intermed Fluid Mech	Tues / Thurs	12:30pm - 01:45pm
ME 8253	Fatigue in Engin Design	Tues / Thurs	11:00am - 12:15pm
ME 8513	Classical Thermo	Mon / Wed / Fri	08:00am - 08:50am

## **Course Descriptions**

## ASE 6133 Automatic Control

Instructor: Yang Cheng

(Section 501) (Prerequisite: ASE 4123). Three hours lecture. Optimization techniques; structural flexibility effects; statistical design; sample-data control systems.

## ASE 6153 Advanced Performance

Mon / Wed / Fri 12:00pm - 12:50pm

03:30pm - 04:45pm

Tues / Thurs

Instructor: Calvin Walker

(Section 501) (Prerequisite: ASE 2113 or consent of instructor). Three hours lecture. Performance methods use for current aeronautical vehicles. Configurations considered are sailplanes, V/STOL aircraft, subsonic/supersonic transports, and fighters.

ASE 6423	Int Comput Fluid Dyn	Mon / Wed / Fri	09:00am - 09:50am	
	Instructor: Eric Collins			
	(Section 501) (Prerequisite: Consent of instructor). The computational fluid dynamics (CFD); review of numer CFD; numerical solution to selected fluid dynamic proceeding of the selected fluid dynamic p	nree hours lecture. Ele rical analysis and fluid oblems.	ementary aspects of mechanics as pertinent to	
ASE 6813	Adv Orbital Mechanics	Tues / Thurs	12:30pm - 01:45pm	
	Instructor: Yang Cheng			
	(Section 501) (Prerequisite: ASE 3813). Three hours numerical integration. Global positioning system, laur	lecture. Orbital mechanch performance and o	anics; perturbations and optimization.	
ASE 8353	Turbulent Flow	Mon / Wed / Fri	08:00am – 08:50am	
	Instructor: Adrian Sescu			
	(Section 501) (Prerequisite: ASE 8343). Three hours theory of turbulence; isotropic and non-isotropic turbu boundary layer; free turbulent flow.	lecture. Origins of turb lence; equations of tu	oulence; stability statistical rbulent flow; turbulent	
ASE 8423	Comput Fluid Dyn II	Tues / Thurs	3:30pm - 04:45pm	
	Instructor: Staff			
	(Section 501) (Prerequisite: ASE 8413 or equivalent). Three hours lecture. Compressible Viscous Methods; Navier-Stokes equation methods; turbulence models; incompressible methods; panel methods; finite element methods, current literature.			
CE 6433	Foundations	Tues / Thurs	09:30am - 10:45am	
	Instructor: Farshid Vahedifard			
	(Section 501) (Prerequisite: Grade of C or better in C lecture. Introduction to exploration and engineering enselection and design of foundations for structures and	E 3413; or consent of valuation of subsoil ar d earth masses.	major advisor). Three hours ad groundwater conditions for	
CE 6513	Engr. Hydrology	Tues / Thurs	08:00am - 09:15am	
	Instructor: John Ramirez Avila			
	(Section 501) (Prerequisite: grade of C or better in CE lecture. Hydrologic processes; rainfall-runoff analysis design.	E 3503; or consent of ; groundwater flow; fre	major advisor). Three hours equency analysis; hydrologic	
CE 6863	Water & Waste Engr.	Mon / Wed	12:30pm - 01:45pm	
	Instructor: Staff			
	(Section 501) (Prerequisite: CE 3823 with grade of C lecture. Evaluation of municipal water and wastewate unit processes/unit operations for the treatment of mu	or better; or consent or r characteristics and f unicipal water and was	of major advisor). Three hour lows; application of various stewater.	

CE 6993	Prestr Concr Structures	Mon / Wed / Fri	08:00am - 08:50am	
	Instructor: Staff			
	(Section 501) (Prerequisite: Grade of C or better in CE 4 lecture. Loads on structures. Analysis and design of pre specifications. Focus on beams.	1973; or consent of m stressed concrete str	najor advisor). Three hours ructures using ACI	
CE 8463	Slopes & Embankments	Tues / Thurs	05:00pm - 06:15pm	
	Instructor: Staff			
	(Section 501) (Prerequisite: Consent of Major Advisor). placed on an angle from the horizontal.	Analysis and design	of geotechnical systems	
CE 8563	Groundwater Res Eval	Tues / Thurs	11:00am - 12:15pm	
	Instructor: John Ramirez Avila			
	(Section 501) (Prerequisite: Consent of Major Advisor). Darcy's law; equations of groundwater flow; confined an groundwater quality; aquifer management.	Three hours lecture.	Groundwater movement; ells and well field analysis;	
CE 8683	Finite Element Analy	Mon / Wed / Fri	08:00am - 08:50am	
	Instructor: Staff			
	(Section 501) (Prerequisite: Consent of Major Advisor). Three hours lecture. Energy and elasticity principles. Development of planar three-dimensional and curved elements. Applications to plates and shells. Use of computer programs.			
CHE 6173	Polymer Science & Technology	Mon / Wed / Fri	12:00pm - 12:50pm	
	Instructor: Julie Jessop			
	(Section 501) (Prerequisite: C or better in CH 4513 and societally important polymeric materials and issues with chemistry, properties, and processing.	MA 1723). Three hou a broad exposure to	urs lecture. Introduction to to topics in polymer	
CHE 8011	Chem En Seminar	Fridays	03:00pm - 04:50pm	
	Instructor: Billy Elmore			
	(Section 501) (Prerequisite: Graduate standing). Library chemical engineering literature.	assignments and rep	ports on the current	
CHE 8123	Chem Kinetics Dyn	Tues / Thurs	02:00pm - 03:15pm	
	Instructor: Hossein Toghiani			
	(Section 501) (Prerequisite: consent of instructor). Three hours lecture. Theory and interrelations of phenomemological chemical kinetics and molecular reaction dynamics.			
CHE 8523	Adv Tran Pheno	Tues / Thurs Tuesdays	03:30pm - 04:45pm 06:00pm – 08:50pm	
	Instructor: Santanu Kundu			
	(Section 501) Three hours lecture. (Prerequisite: Gradua momentum, heat, and mass transport. Conservation equand multicomponent mass equation of change.	ate standing). Fundar uations. Continuity, m	mental principles in notion, energy equations,	

	(Section 501) (Prerequisite: CSE 2383 Data S probability, Information theory, Symmetric Cry Cryptography, Standard Cryptographic Primitiv	tructures and Algorithms). The ptography, Introductory Numi ves, Cryptographic Protocols	hree hours lecture. Discrete ber Theory, Asymmetric
CSE 6214	Intro to Software Eng	Tues / Thurs	12:30pm - 01:45pm
	Instructor: Staff		
	(Section 501) (Prerequisite: CSE 2383 with a glaboratory. Introduction to software engineerin design; testing; debugging; maintenance; docusoftware project management, reuse, and ree	grade of C or better). Three h g; planning, requirements, ar umentation. Alternative desig ngineering.	nours lecture. Two hours nalysis and specification, n methods, software metrics
CSE 6363	Software Reverse Engineering	Tues / Thurs	03:30pm - 04:45pm
	Instructor: Stephen Torri		
	(Section 501) (Prerequisite: Grade of C or beth specification recovery and malicious software programs and communications in the absence	er in CSE 3183). Three hour analysis. Tools and techniqu of documentation.	s lecture. Software es for analyzing compiled
CSE 6383	Network Security	Mon / Wed / Fri	11:00am - 11:50am
	Instructor: George Trawick		
	(Section 501) (Prerequisites: CSE 4173/6173 4153/6153). Three hours lecture. Basic and ac symmetric and asymmetric cryptography, key protocols, network systems security.	Cryptography; and credit or r Ivanced concepts in cryptogr management, wired and wire	registration in CSE aphy and network security: eless network security
CSE 6623	Computational Biology	Tues / Thurs	09:30am - 10:45am
	Instructor: Andy Perkins		
	(Section 501) (Prerequisite: BCH 4113/6113 o hours lecture. Computational analysis of gene Algorithms for sequence alignment, structural current topics.	r equivalent and CSE 1384 c sequences and protein struc and functional genomics, cor	or CSE 4613/6613). Three ctures on a large scale. nparative genomics, and
CSE 6633	Artificial Intell	Mon / Wed	02:00pm - 03:15pm
	Instructor: Zhiqian Chen		
	(Section 501) (Prerequisite: Grade of C or bett Study of the computer in context with human t programming; search strategies; knowledge re perception; learning.	er in CSE 2383 and CSE 28 hought processes. Heuristic presentation; natural langua	13) Three hours lecture. programming; search ge understanding;
CSE 6733	Operating Systems I	Tues / Thurs	03:30pm - 04:45pm
	Instructor: Staff		-
	(Section 501) (Prerequisites: C or better in CSE 3723 and CSE 3183, or C or better in CSE 2383 and ECE 3724). Three hours lecture. Historical development of operating systems to control complex computing systems; process management, communication, scheduling techniques; file systems		

#### CSE 6173 Cryptography

Instructor: Mahalingam Ramkumar

(Section 501) (Proroquisite: CSE 2383 Data Structures and Algorithms). Three hours lecture. Discrete

concepts and operation; data communication, distributed process management.

Tues / Thurs 11:00am - 12:15pm

CSE 6833	Intro to Algorithms	Mon / Wed	12:30pm - 01:45pm
	Instructor: Eric Hansen		
	(Section 501) (Prerequisites: CSE 2383 and CSE 2813 lecture. Study of complexity of algorithms and algorithm algorithms, including recurrence, divide-and-conquer, d	with a grade of C or a design. Tools for ar lynamic programming	better). Three hours halyzing efficiency; design of g and greedy algorithms.
CSE 8011	Seminar	Mondays	10:00am – 10:50am
	Instructor: Shahram Rahimi		
	(Section 501) One hour seminar. Reports on recent adv guest speakers, faculty, and students; student participa	vances and problems tion, general discuss	s in computer science by ion.
CSE 8413	Visualization	Mon / Wed	03:30pm - 04:45pm
	Instructor: T. Jankun-Kelly		
	(Section 501) (Prerequisites: CSE 4413/6413). Three h dimensional rendering and modeling techniques; viewir modeling; methodologies for visualization of scalar and	ours lecture. Essenting transformations, ill vector fields in three	al algorithms for three- umination, surface dimensions.
CSE 8813	Theory of Computation	Mon / Wed	12:30pm - 01:45pm
	Instructor: Ioana Banicescu		
	(Section 501) (Prerequisite: CSE 3813). Three hours le unsolvability, complexity theory, formal grammars and p computer science.	cture. Study of abstra parsing, and other ac	act models of computation, lvanced topics in theoretical
CSE 8843	Seg/Parallel Airthm	Mon / Wed	03:30pm - 04:45pm
	Instructor: Ioana Banicescu		
	(Section 501) (Prerequisite: CSE 4833/6833). Three ho theory of complexity, parallel algorithms.	urs lecture. Complex	ity of sequential algorithms,
ECE 6193	Automotive Engineering	Tues / Thurs	08:00am - 09:15am
	Instructor: Staff		
	(Section 501) Three hours lecture. Fundamentals of au mechanical systems, electrical systems, and industrial CHE/IE/ME 4193/6193).	tomotive engineering and systems enginee	, including power units, ering aspects. (Same as
ECE 6313	Antennas	Tues / Thurs	08:00am - 09:15am
	Instructor: Staff		
	Instructor: Staff (Section 501) (Prerequisite: Grade of C or better in ECI antennas and electromagnetic radiation, antenna desig antenna types, and antenna arrays.	E 3323). Three hours n and analysis, antei	lecture. Introduction to nna performance measures,
ECE 6633	Instructor: Staff (Section 501) (Prerequisite: Grade of C or better in ECI antennas and electromagnetic radiation, antenna desig antenna types, and antenna arrays. <b>Pwer Distrib Systems</b>	E 3323). Three hours n and analysis, anter <b>Tues / Thurs</b>	lecture. Introduction to nna performance measures, 11:00am - 12:15pm
ECE 6633	Instructor: Staff (Section 501) (Prerequisite: Grade of C or better in ECI antennas and electromagnetic radiation, antenna desig antenna types, and antenna arrays. <b>Pwer Distrib Systems</b> Instructor: Staff	E 3323). Three hours n and analysis, anter <b>Tues / Thurs</b>	e lecture. Introduction to nna performance measures, 11:00am - 12:15pm

ECE 6793	Literate Programming	Tues / Thurs Fridays	09:30am - 10:20am 12:00pm - 01:40pm
	Instructor: Bryan Jones		
	(Section 501) (Prerequisites: Grade of C or better in EC standing or consent of instructor). Two hours lecture and development and embedded systems, with an emphasis longevity. (Same as CSE 4353/6353).	E 3724 or CSE 3724 d two hours laborator s on interleaved docu	and junior or graduate y. Techniques for software imentation for code
ECE 8633	Control of DER Systems	Mon / Wed	02:00pm - 03:15pm
	Instructor: Staff		
	(Section 501) (Prerequisite: ECE 3614 or ECE 4913 or of Control aspects of power electronic converters used as energy systems including the power flow control, power stability issues.	consent of instructor) the interface in distril quality aspects, grid	. Three hours lecture. outed and renewable supporting functions and
ECE 8683	Power Sys Opt & Control	Tues / Thurs	12:30pm - 01:45pm
	Instructor: Yong Fu		
	(Section 501) (Prerequisite: Grade of C or better in ECE Power generation characteristics; network modeling; eco constrained unit commitment; hydrothermal coordination	: 4613 or ECE 6613). onomic dispatch; unit n.	Three hours lecture. t commitment; security
ECE 8803	Random Signals & Systems	Mon / Wed / Fri	11:00am - 11:50am
	Instructor: Chun-Hung Liu		
	(Section 501) (Prerequisite: IE 4613 or MA 4523 or equi random processes, auto-and cross-correlation, energy a calculus, ergodicity. Response of linear systems to rand	ivalent). Three hours and power spectral de lom signals, and Mar	lecture. Probability and ensities, mean-square kov chains.
ECE 8833	Computational Intelligence	Tues / Thurs	03:30pm - 04:45pm
	Instructor: Chaomin Luo		
	(Section 501) (Prerequisites: MA 4523/6523 or ECE 880 lecture. An overview of the field of computational intellig uncertainty and pattern recognition with applications to s	03, or consent of insta ence for automated o signal and image pro	ructor). Three hours decision-making under cessing.
ECE 9100	Graduate Seminar	ТВА	ТВА
	Instructor: Qian Du		
	(Section 501) Presentations and discussions by faculty, current topics in the areas of electrical and computer en graduation for doctoral degree. Repeatable up to three t	guest speakers, and gineering. Must be ta times.	graduate students on ken three times before
EM 6123	Intro Finite Element	Mon / Wed / Fri	11:00am – 11:50am
	Instructor: Staff		
	(Section 501) (Prerequisite: Consent of Instructor). Thre mathematical theory, formulation, and computer implem Application to one-and two-dimensional problems in eng	e hours lecture. Intro entation of the finite gineering mechanics.	duction to the element method.

EM 6133	Composite Materials	Mon / Wed / Fri	01:00pm - 01:50pm	
	Instructor: Han-Gyu Kim			
	(Section 501) (Prerequisites: EM 3213 an relations for anisotropic material, lamina p	d MA 3253.) Three hours lecture properties, laminate properties, co	e. Stress, strain, constituative omposite beams and plates.	
EM 8113	Theory Of Cont Media	Mon / Wed / Fri	10:00am - 10:50am	
	Instructor: Davy Belk			
	(Section 501) (Prerequisite: MA 3353 or c to the general theory of continuous media mechanics.	onsent of the instructor). Three h and its application to the theorie	nours lecture. An introduction as of elasticity and fluid	
GE 8003	MENG Capstone	ТВА	ТВА	
	Instructor: Kari Reeves (P) / Tamra Swar	n		
	(Section 501) Three hours lecture. An ind candidates for the Master of Engineering.	ividualized professional project c Formal written paper and preser	ourse open only to ntation are required.	
IE 6113	Human Factors Eng	ТВА	ТВА	
	Instructor: Lesley Strawderman			
	(Section 501) (Prerequisite: Junior standin Human capabilities and limitations affectir Emphasis on physiological and psycholog	ng in engineering). Two hours lea ng communications and response jical fundamentals.	cture. Three hours laboratory. es in man-machine systems.	
IE 6533	Project Mgt	ТВА	ТВА	
	Instructor: Junfeng Ma			
	(Section 501) (Prerequisites: Grade of C or and GERT for planning, managing and co networks.	or better in IE 4613). Three hours ntrolling projects. Computer proc	s lecture. Use of CPM, PERT, cedures for complex	
IE 6543	Logistics Engineering	ТВА	ТВА	
	Instructor: Staff			
	(Section 501) (Prerequisite: IE 4613 and senior or graduate standing, Co-requisites: IE 4733 or MA 4733). Three hours lecture. Analysis of complex logistics networks. Integration of supply, production, inventory, transportation, and distribution. Strategies for reducing logistics costs and lead times. Customer-supplier partnerships.			
IE 6613	Eng Statistics I	ТВА	ТВА	
	Instructor: Haifeng Wang			
	(Section 501) (Prerequisite: MA 1723). The include: probability, probability distribution and statistical inferences.	ree hours lecture. Introduction to s, data analysis, parameter estir	o statistical analysis. Topics nation, statistical intervals,	

IE 6623	Eng Statistics II	ТВА	ТВА	
	Instructor: Vidanelage Dayarathna			
	(Section 501) (Prerequisite: Grade of C or better in IE 4 4613/6613. Introduction to engineering applications of r and nonparametric methods.	613). Three hours lec egression, experimer	cture. Continuation of IE Ital design and analysis,	
IE 6733	Linear Programming I	ТВА	ТВА	
	Instructor: Vidanelage Dayarathna			
	(Section 501) (Prerequisites: MA 3113). Three hours leprogramming; formulating optimization models; simplex integer programming; branch-and-bound algorithm; rea programming models (Same as MA 4733/6733).	cture. Theory and app algorithm, duality and I-life applications of lin	blication of linear d sensitivity analysis, near and integer	
IE 6773	Sys Simulation I	ТВА	ТВА	
	Instructor: Seunghan Lee			
	(Section 501) (Prerequisite: Grade of C or better in IE 4 Co-requisite: IE 4623). Three hours lecture. The princip emphasis on the statistics of simulation and the use of	934, IE 4933 or equiv les of simulating stoc discrete-event simula	valent programming course, hastic systems with an tion languages.	
IE 6933	Information System in IE	ТВА	ТВА	
	Instructor: Haifeng Wang			
	(Section 501) (Prerequisite: Grade of C or better in CSE lecture. An introduction to the design and development engineering applications.	E 1233, CSE 1284 or of information system	equivalent). Three hours is for use in industrial	
IE 6990	Special Topic In IE	ТВА	ТВА	
	Instructor: Reuben Burch , V(P) / Charles Freeman , Jr.			
	(Section 501) Credit and title to be arranged. This cours developing subject matter areas not covered in existing one title within two academic years).	se is to be used on a l courses. (Courses lir	limited basis to offer nited to two offerings under	
IE 6990	Special Topic In IE	ТВА	ТВА	
	Instructor: Staff			
	(Section 502) Credit and title to be arranged. This cours developing subject matter areas not covered in existing one title within two academic years).	se is to be used on a l courses. (Courses lir	imited basis to offer nited to two offerings under	
IE 8333	Prod Control Sys II	ТВА	ТВА	
	Instructor: Nazanin Morshedlou			
	(Section 501) (Prerequisites: IE 4333). Three hours led production planning, operations scheduling and forecas	cture. Inventory syster sting systems.	ns, static and dynamic	

IE 8733	Decision Theory	ТВА	ТВА		
	Instructor: Brian Smith				
	(Section 501) (Prerequisite: IE 4613). Three hours lectumaking process. Criteria for decision making. Treatmen situations.	ure. A quantitative dev at of risk under uncerta	velopment of the decision ainty and in conflict		
IE 8990	Special Topic In IE	ТВА	ТВА		
	Instructor: Mohammad Marufuzzaman				
	(Section 501) Credit and title to be arranged. This cours developing subject matter areas not covered in existing one title within two academic years).	se is to be used on a g courses. (Courses lin	limited basis to offer nited to two offerings under		
ME 6193	Automotive Engineering	Tues / Thurs	08:00am - 09:15am		
	Instructor: Staff				
	(Section 501) Three hours lecture. Fundamentals of au mechanical systems, electrical system and industrial ar CHE/ECE/IE 4193/6193).	tomotive engineering. nd systems engineerir	, including power units, ng aspects. (Same as		
ME 6233	Fundamentals of FEA	Mon / Wed	12:30pm - 01:45pm		
	Instructor: Matthew Priddy				
	(Section 501) Three hours lecture. This course focuses method with commercially-available FE software and th analysis. Topics include mechanical response with a su (e.g., nonlinear problems and dynamic loading).	on the implementatic ne basic mathematica urvey of thermal analy	on of the finite element (FE) I theory of finite element sis and advanced topics		
ME 6353	Alt Energy Sources	Mon / Wed / Fri	10:00am - 10:50am		
	Instructor: B. Keith Hodge				
	(Section 501) (Prerequisite: ME 3313). Three hours lec energy derived from solar, hydro, geothermal, wind, oc	ture. Analysis and de ean, waste, and biom	sign of systems using ass sources.		
ME 6393	Power Generation Systems	Mon / Wed / Fri	11:00am - 11:50am		
	Instructor: Staff				
	(Section 501) (Prerequisites: ME 3313 and ME 3523). of power generation systems with emphasis on optimiz economics. Energetic, economic, and environmental is incorporated in this course.	Three hours lecture. E ation methods, syster sues as well as exerg	Evaluation and optimization n simulation, and y analysis may be		
ME 6833	Intermed Fluid Mech	Tues / Thurs	12:30pm - 01:45pm		
	Instructor: Staff				
	(Section 501) (Prerequisite: EM 3313). Three hours lec Newtonian and non-Newtonian fluids, boundary-layer th compressible flow with applications.	ture. Differential equa heory, laminar and tur	ations of fluid mechanics, bulent solutions,		

# ME 8253 Fatigue in Engin Design Tues / Thurs 11:00am - 12:15pm Instructor: Youssef Hammi (Section 501) Three hours lecture. Prediction and prevention of fatigue failure in metallic materials.

## ME 8513 Classical Thermo

Mon / Wed / Fri 08:00am - 08:50am

Instructor: Staff

(Section 501) Three hours lecture. Postulational treatment of the physical laws of equilibrium, thermostatics. Equations of state, processes, equilibrium stability, reactive systems, phase transitions.

## Mississippi State University Registration Information

#### Admissions

All students participating in the off-campus program should contact Tamra Swann to get information on the Admissions and the Registrations process. Tamra Swann (662-325-3786) is the Bagley Distance Education Coordinator and will assist students in pursuing their master's degree program.

Students applying after December 1st should visit <u>grad.msstate.edu</u> and select the APPLY NOW button to apply as a Graduate Unclassified Spring 2023 student. This is a quick process for students that are not signing up for a full degree program. Unclassified students may transfer a limited number of credits into their degree program with the approval of the graduate program.

Students that choose to apply to a specific program should confirm the deadline dates for that specific program. Please note that applications do require undergraduate transcripts. If a student needs to send a transcript, it is recommended that they initiate that process as soon as possible. Students should visit their college's registrar's website to find out how to request their transcript. Visit <u>https://www.grad.msstate.edu/students/admissions/where-to-send-documents</u> to see where to send these documents at MSU.

## Registration

Registration for Spring 2023 is ongoing through December 1st for applicants applying for online degree programs. For unclassified students, the registration deadline for Spring 2023 is 11:59 PM (CST) before the first day of class. Applications can be started at <a href="https://apply.grad.msstate.edu/">https://apply.grad.msstate.edu/</a>

## Tuition

Online tuition for Spring 2023 is \$539.00 per graduate credit hour. Fee details can be found at <u>https://www.controller.msstate.edu/accountservices/tuition/</u>.

Note: The Center of Higher Learning makes every attempt to accurately list tuition rates for our participating universities. It is advisable, however, to check with the University before submitting your final paperwork or payment.

## Textbooks

Students wishing to order textbooks can do so by visiting the MSU Bookstore website at <a href="https://msstate.bncollege.com/shop/msu/home">https://msstate.bncollege.com/shop/msu/home</a> or calling at (662) 325-8361. Students can also visit the Campus Book Mart website at <a href="https://www.campusbookmart.net/cbm/">https://www.campusbookmart.net/cbm/</a> or calling at (662) 325-8361. Students can also visit the Campus Book Mart website at <a href="https://www.campusbookmart.net/cbm/">https://www.campusbookmart.net/cbm/</a> or calling at (662) 325-8361.

## **Important Dates**

January 17 <sup>th</sup>	Classes begin
January 23 <sup>rd</sup>	Last day to drop a course without a grade (5 <sup>th</sup> class day)
January 24 <sup>th</sup>	Last day to register or add a course (6th class day) 5:00pm
May 1 <sup>st</sup>	Classes end
May 4 <sup>th</sup>	Final exams begin

For questions about registration and schedule changes, contact Tamra Swann at 662.325.3786 or tswann@bagley.msstate.edu.