

Department of Aeronautical Engineering

Bengaluru-560107

COURSE OUTCOMES

DEPARTMENT	AE	SEMESTER	3	COURSE CODE	18AE32	COURSE ID	C202	
COURSE TITLE		Aero Thermo	odynar	nics	I			
COURSE OUTCO	DME			COURSE OUT	COME STAT	EMENTS		
C202.1		Remember t	he fun	damentals of en	ergy interac	tions, laws of	thermodynamics	
C202.2	Understand The relationship between different temperature scales, energy							
0_0		its property.						
C202.3		Relate the principles of gas cycles in various systems						
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DEPARTMENT	AE	SEMESTER	3	COURSE CODE	18AE33	COURSE ID	C203	
COURSE TITLE		Mechanics o	f Mate	rials	•			
COURSE OUTCO	DME			COURSE OUT	COME STAT	EMENTS		
C203.1		Understand Elastic Properties of Materials, Different types of stress due to application of loads and energy stored in various structural members						
C203.2		Compute the relation for stress and strain distribution, Shear force and Bendin						
		moment diagram, Torque and stability of columns from failure theories						
C203.3		Evaluate the Shafts and C	stresse	s, strains and stra	ain energy in	a Bars, Cylinder	rs, Beams,	
		Sharts, and C	Joiuiiii	.5				
DEPARTMENT	AE	SEMESTER	3	COURSE	18AE34	COURSE ID	C204	
			_	CODE				
COURSE TITLE		Elements of	Aerona	autics	•			
COURSE OUTCO	DME			COURSE OUT	COME STAT	EMENTS		
C204.1		Assimilate th	ne basic	e principles of av	viation.			
C204.2		Gain the kno	wledge	e on basic princip	ple of aviatio	on.		
C204.3		Appreciate th	ne com	plexities involve	d during dev	velopment of fli	ght vehicles.	
DEPARTMENT	AE	SEMESTER	3	COURSE CODE	18AE35	COURSE ID	C205	
COURSE TITLE		Mechanics o	of Fluid	S				
COURSE OUTCO	DME			COURSE OUT	COME STAT	EMENTS		
C205.1		Understand t of boundary	he basi layer ii	cs of fluid prope n fluid flow as w	erties, statics, ell as CFD	, dynamics, kin	ematics, concept	
C205.2		Absorb the e	ssence	of governing law	vs of fluid fl	ow		
C205.3		Evaluate the	Evaluate the key fluid properties, meta centric height, lift, drag.					



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DEPARTMENT	AE	SEMESTER	3	COURSE CODE	18AE36	COURSE ID	C206		
COURSE TITLE		Measureme	nt and	Metrology			<u></u>		
COURSE OUTCO	ME			COURSE OUT	COME STATE	EMENTS			
C206.1		Have foundational knowledge on metrology, measurements, measuring equipmentsCO3: Measure force, torque, pressure, strain, temperature, screw, and gear profile.							
C206.2		Implement th	ne knov	vledge in measu	ring instrume	ents and their u	tilization		
C206.3		Measure for	ce, torq	ue, pressure, stra	ain, temperat	ure, screw and	gear profile.		
DEPARTMENT	AE	SEMESTER	SEMESTER3COURSE CODE18AEL37ACOURSE IDC207						
COURSE TITLE		MEASUREM	ENTS A	ND METROLOG	Y LAB				
COURSE OUTCO	ME			COURSE OUT	COME STATE	EMENTS			
C207.1		Understand t measuremen	the prin ts, elec	ciples of measur tronic instrumen	ements relate tation and th	ed to mechanic ermal effects	al		
C207.2		Demonstrate the ability to perform measurements and tabulate the readings and infer the results Graphically/mathematically							
C207.3		Interpret the concepts and results both orally and written.							
DEPARTMENT	AE	SEMESTER	3	COURSE CODE	18AEL38	COURSE ID	C208		
COURSE TITLE		MACHINE SH	IOP LA	В					
COURSE OUTCO	OME			COURSE OUT	COME STATE	EMENTS			
C208.1		Demonstrate and metal cu industrial en	shop s tting eo vironm	afety associated quipment and use	with operations of personal	on of machine t protective equ	tool equipment ipment found in		
C208.2		o familiarize mechanical o	s the m trawing	achines in the w g/job sheet.	orkshop and	interpret the bl	ueprints of		
C208.3		To operate n standards.	nachine	es (Lathe, Milling	g, shaping) ir	accordance w	ith industry		
DEPARTMENT	AE	SEMESTER	5	COURSE CODE	18AE51	COURSE ID	C301		
COURSE TITLE		MANAGEM	ENT AN	ND ENTREPRENE	URSHIP				
COURSE OUTCO	OME			COURSE OUT	COME STATE	EMENTS			
C301.1		Understand t	foundat	tions of manager	nent and entr	epreneurship.			
C301.2		Apply the kr controlling.	nowledg	ge on planning, o	organizing, st	affing, directin	ig and		
C301.3		implement th	ne knov	vledge gained in	both small-	and large-scale	industries.		



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DEPARTMENT	AE	SEMESTER	5	COURSE CODE	18AE52	COURSE ID	C302		
COURSE TITLE		AERODYNA	MICS -	·					
COURSE OUTCO	ME			COURSE OUT	COME STATI	EMENTS			
C302.1		Understand t	he con	cepts of compres	ssible flow a	nd shock pheno	menon.		
C302.2		Apply know	ledge o	of oblique shock a	and expansio	on wave formation	ion.		
C302.3		Analyze the	compre	essible flow prob	olems.				
DEPARTMENT	AE	SEMESTER	5	COURSE CODE	18AE53	COURSE ID	C303		
COURSE TITLE		AIRCRAFT ST	RUCTU	JRES - I					
COURSE OUTCO	ME			COURSE OUT	COME STATI	EMENTS			
C303.1		Able to comp	pare va	rious types of str	resses and str	rains.			
C303.2		Identify appr	opriate	e materials for su	itable applic	ation based on j	properties.		
C303.3		Able to analy	vse the	stresses on the s	tructures und	ler various load	ing conditions.		
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DEPARTMENT	AE	SEMESTER	5	COURSE CODE	18AE54	COURSE ID	C304		
COURSE TITLE		INTRODUCT	ION TO	COMPOSITE M	ATERIALS				
COURSE OUTCO	ME			COURSE OUT	COME STATI	EMENTS			
C304.1		Explain the a conventional	dvanta materi	ages of using con ials for specific a	nposite mater applications	rials as an alter	native to		
C304.2		Describe the parts	advan	ced fabrication a	nd processin	g for producing	composite		
C304.3		Evaluate the	micro-	and macro-mec	hanical beha	vior of compos	ite laminates.		
DEPARTMENT	AE	SEMESTER	5	COURSE CODE	18AE55	COURSE ID	C305		
COURSE TITLE		AIRCRAFT SY	STEM	S & INSTRUMEN	TATION	<u>.</u>			
COURSE OUTCO	ME			COURSE OUT	COME STATI	EMENTS			
C305.1		Understand t	he con	ventional and mo	odern control	l systems.			
C305.2		Compare the	classe	s of the aircraft.					
C305.3		Categorize d	ifferen	t types of aircraf	t instruments	5			
DEPARTMENT	AE	SEMESTER	5	COURSE CODE	18AE56	COURSE ID	C306		



COURSE OUTCO	ME			COURSE OUT	COME STATI	EMENTS			
C306.1		Understand t vibrations.	the prin	ciple of Simple	Harmonic M	otions and vari	ous types of		
C306.2		Determine th	ne vibra	ations using vibra	ation instrum	ents.			
C306.3		Analyze the	multi-c	legree freedom s	ystems				
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DEPARTMENT	AE	SEMESTER	SEMESTER 5 COURSE 18AEL57 COURSE ID C307 CODE						
COURSE TITLE		AERODYNAMICS LAB							
COURSE OUTCO	ME			COURSE OUT	COME STATI	EMENTS			
C307.1		Understand of the wind turn	Understand different types of wind tunnel and calibrate the test section speed the wind tunnel.						
C307.2		Illustrate the	stream	patterns over bl	uff and slend	ler bodies.			
C307.3		Investigate the	he varia	ation of surface p	pressure over	bluff and slend	ler bodies.		
C307.4		Predict the li	ft and	drag co efficient	over an airpl	lane model			
DEPARTMENT	AE	SEMESTER	5	COURSE	18AEL58	COURSE ID	C308		
				CODE					
COURSE TITLE		ENERGY CON	VERSI	ON AND FLUID I	MECHANICS	LAB			
COURSE OUTCO	ME			COURSE OUT	COME STATI	EMENTS			
C308.1		Understand bengines.	basic te	rms, working pr	ocess and pe	rformance para	meters of IC		
C308.2		Tabulate and fuel and lubr	l interp icating	ret the performation oils.	nce paramete	ers of IC engine	s, properties of		
C308.3		Define and u	Indersta	and fluid and the	ir properties				
C308.4		Demonstrate discharge by	and ob the ma	otain mathematic achineries	al relations t	to calculate the	efficiency and		
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DEPARTMENT	AE	SEMESTER	7	COURSE CODE	18AE71	COURSE ID	C401		
COURSE TITLE		AIRCRAFT ST	FABILIT	Y AND CONTRO	L				
COURSE OUTCO	ME			COURSE OUT	COME STATI	EMENTS			
C401.1		Understand t	the con	cepts of aircraft	stability and	control			
C401.2		Derive equat	tions of	motions and an	alyze stabilit	y parameters.			
C401.3		Apply the k	nowled	ge of dynamic st	tability.				
DEPARTMENT	AE	SEMESTER	7	COURSE CODE	18AE72	COURSE ID	C402		
COURSE TITLE		COMPUTATI	ONAL	FLUID DYNAMIC	S	·			
COURSE OUTCO	ME			COURSE OUT	COME STATI	EMENTS			
C402.1		Apply the ba	isic prin	nciples of compu	itational fluid	d dynamics.			
C402.2		Derive the genergy equat	overnir tions	ng flow equation	s such as con	tinuity, momer	tum, and		



			Bengalara 500107						
C402.3		Compute the	types	of physical flow	based on par	rtial differential	equations.		
DEPARTMENT	AE	SEMESTER	7	COURSE	18AE731	COURSE ID	C403		
				CODE					
COURSE TITLE		FATIGUE AN	D FRA	CTURE MECHAN	ICS				
COURSE OUTCO	ME	COURSE OUTCOME STATEMENTS							
NO									
C402 1		Understand t	he basi	ics of fatigue of s	structures.				
C403.1									
C403.2	C403.2 Comprehend the fracture mechanics.								
C403.3		Acquire the	knowle	dge of fatigue de	esign and tes	ting.			
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DEPARTMENT	AE	SEMESTER	7	COURSE	18AE742	COURSE ID	C404		
				CODE					
COURSE TITLE		WIND TUNN	EL TEC	HNIQUES					
COURSE OUTCO	ME			COURSE OUT	COME STATI	EMENTS			
C404.1		Classify the	Classify the types and functions of wind tunnel.						
C404.2		Apply the principles and procedures for model testing in the wind tunnel							
C404.3		Distinguish the conventional measurement techniques and special wind tunnel							
		techniques							
DEPARTMENT	AE	SEMESTER	7	COURSE	18AE753	COURSE ID	C405		
				CODE					
COURSE TITLE		UNMANNED) AERIA	L VEHICLES					
COURSE OUTCO	ME			COURSE OUT	COME STATI	EMENTS			
C405.1		Select the pr	opulsic	on system and ma	aterials for st	ructures.			
C405 2		Explain the h	nasic a	erodynamics net	formance st	ability and con	trol required for		
C405.2		UAV.	subie u	liouynannes, per		aomity and con	alor required for		
C405.3		Apply the ba	sic cor	cepts of UAV sy	vstems				
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DEPARTMENT	AE	SEMESTER	7	COURSE	18AEL76	COURSE ID	C406		
			-	CODE					
COURSE TITLE			& ANA	LYSIS LAB					
COURSE OUTCO	ME			COURSE OUT	COME STAT	EMENTS			
NO									
C406.1		Understand t	he desi	ign drawings.					
C406.2		Design the c	ompon	ent/parts effectiv	vely using the	e CAE tools			
C406.3		Analyze com	ponen	t/parts effectivel	y using the C	CAE tools			
C406.4		Interpret the	concep	ots and results bo	oth orally and	l written			
Therpret the concepts and results both orany and written									



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DEPARTMENT	AE	SEMESTER	7	COURSE CODE	18AEL77	COURSE ID	C407	
COURSE TITLE		FLIGHT SIMU	JLATIO	N LAB		•		
COURSE OUTCO	DME			COURSE OUT	COME STATI	EMENTS		
C407.1		Write progra	m to si ormanc	mulate concepts e. aircraft stabilit	of flight me	chanics (Contro d)	ol systems,	
C407.2		Simulate/Im	plemen	t discrete compu	tations on sy	stems and veri	fy its properties	
C407.3		Interpret the	simula	tion result and p	lots both oral	lly and written.		
C407.4		Gain experier	nce in t	he application of	MATLAB	to real engineer	ing designs.	
DEPARTMENT	AE	SEMESTER4COURSE CODE18AE41COURSE IDC211						
COURSE TITLE		COMPLEX A	NALYSI	S, PROBABILITY	AND STATIS	TICAL METHO	DS	
COURSE OUTCO	OME			COURSE OUT	COME STATI	EMENTS		
C211.1		To provide an mapping and a heat conduction	n insigl special on and	nt into application functions arising field theory	ns of comple g in potential	x variables, con theory, quantu	nformal m mechanics,	
C211.2		To develop probability distribution of discrete, continuous random variables and joint probability distribution occurring in digital signal processing, design engineering and microwave engineering.						
DEPARTMENT	AE	SEMESTER	4	COURSE CODE	18AE42	COURSE ID	C212	
COURSE TITLE		Aerodynami	cs-l					
COURSE OUTCO	OME			COURSE OUT	COME STATI	EMENTS		
C212.1		Understand t	the con	cepts and founda	tion of aeroo	lynamics.		
C212.2		Derive basic	equati	ons of incompres	sible flow o	ver finite wings	s and aerofoil	
C212.3		Assimilate fi viewpoint.	nite wi	ing theory, high l	ift systems f	rom the aerody	namics	
DEPARTMENT	AE	SEMESTER	4	COURSE CODE	18AE43	COURSE ID	C213	
COURSE TITLE		Aircraft Prop	oulsion					
COURSE OUTCO	OME			COURSE OUT	COME STATI	EMENTS		
C213.1		Remember th	he basi	c principles and	theory of airc	craft propulsion	1	
C213.2		Understand t turbines	the fun	ctions of centrifu	gal, axial co	mpressors, axia	al and radial	
C213.3		Compute the	perfor	mance of nozzle	s & inlets an	d combustion c	hamber.	
DEPARTMENT	AE	SEMESTER	4	COURSE CODE	18AE44	COURSE ID	C214	
COURSE TITLE		Mechanisms	and N	lachine Theory				



COURSE OUTCOME COURSE OUTCOME STATEMENTS NO Understand mechanisms and characteristics of machines. C214.1 Understand mechanisms and characteristics of machines. C214.2 Differentiate kinematics and dynamics of machines. C214.3 Apply the concepts of mechanism to gears, gyroscope, rotating and reciprocating masses. DEPARTMENT AE SEMESTER 4 COURSE 18AE45 COURSE ID C211 COURSE OUTCOME Aircraft Material Science COURSE OUTCOME STATEMENTS COURSE outcome state and properties of different aircraft materials like metallin ono-metallic, alloys and super alloys, composites, ablative materials. C215.2 Describe the processing of ablative materials and prevention technique for corrosion proceedure DEPARTMENT AE SEMESTER 4 COURSE COURSE ID C216 COURSE OUTCOME SEMESTER 4 COURSE OUTCOME STATEMENTS C216 C216 COURSE OUTCOME COURSE OUTCOME STATEMENTS E COURSE OUTCOME STATEMENTS C216 COURSE OUTCOME COURSE OUTCOME STATEMENTS C216 C216.1 Understand energy transfer and energy transformation in turbomachines. C216.1			Bengalara Socie,							
C214.1 Understand mechanisms and characteristics of machines. C214.2 Differentiate kinematics and dynamics of machines. C214.2 Apply the concepts of mechanism to gears, gyroscope, rotating and reciprocating masses. DEPARTMENT AE SEMESTER 4 COURSE COURSE INCOME C211. COURSE OUTCOME STATEMENTS C215.1 Understand the basics and properties of different aircraft materials like metalling, alloys and super alloys, composites, ablative materials SEMESTER 4 COURSE OUTCOME STATEMENTS C215.3 Illustrate the potentialities of various high energy materials and material selection procedure COURSE OUTCOME C216.1 Understand energy transfer and energy transformation in turbomachines. C216.1 Understand energy transfer and energy transf	COURSE OUTCO	OME			COURSE OUT	COME STATE	EMENTS			
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C214.3 Apply the concepts of mechanism to gears, gyroscope, rotating and reciprocating masses. DEPARTMENT AE SEMESTER 4 COURSE 18AE45 COURSE ID C211 COURSE TITLE Aircraft Material Science COURSE OUTCOME STATEMENTS COURSE OUTCOME STATEMENTS NO C215.1 Understand the basics and super alloys, composites, ablative materials. C215.2 Describe the processing of ablative materials and prevention technique for corrosion process. C215.3 Illustrate the potentialities of various high energy materials and material selection procedure 18AE46 COURSE ID C216 COURSE OUTCOME COURSE OUTCOME STATEMENTS C216 COURSE OUTCOME STATEMENTS C216 COURSE OUTCOME COURSE OUTCOME STATEMENTS C216 COURSE OUTCOME STATEMENTS C216 COURSE OUTCOME COURSE OUTCOME STATEMENTS C216 COURSE OUTCOME STATEMENTS C216 COURSE OUTCOME C216.1 Understand energy transfer and energy transformation in turbomachines. C217 COURSE TITLE MATERIAL TESTING LAB COURSE ID C217 COURSE TITLE MATERIAL TESTING LAB COURSE ID C217 COURSE TITLE MATERIAL TESTING LAB CO	C214.2		Differentiate kinematics and dynamics of machines.							
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DEPARTMENT AE SEMESTER 4 COURSE CODE 18AE45 COURSE ID C211 COURSE TITLE Aircraft Material Science COURSE OUTCOME STATEMENTS COURSE OUTCOME STATEMENTS COURSE OUTCOME In on-metallic, alloys and super alloys, composites, ablative materials like metallin non-metallic, alloys and super alloys, composites, ablative materials. C215.1 Understand the basics of balative materials and prevention technique for corrosion process. C215.3 Illustrate the potentialities of various high energy materials and material selection procedure DEPARTMENT AE SEMESTER 4 COURSE OUTCOME STATEMENTS C216 COURSE OUTCOME Variante the potentialities of various high energy materials and material selection procedure C216 C216 DEPARTMENT AE SEMESTER 4 COURSE OUTCOME STATEMENTS C216 COURSE OUTCOME COURSE OUTCOME STATEMENTS C216.2 Compute the performance characteristics of turbomachines C216.2 Compute the performance characteristics of hydraulic pumps and turbines. C216.2 Compute the performance characteristics of hydraulic pumps and turbines. C217 COURSE OUTCOME STATEMENTS DEPARTMENT AE SEMESTER 4 COURSE 18 C00RE C217 <			reciprocating	g masse	2S.	8, 8,				
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COURSE OUTCOME NO COURSE OUTCOME STATEMENTS C215.1 NO Understand the basics and properties of different aircraft materials like metallinon-metallic, alloys and super alloys, composites, ablative materials. C215.2 Describe the processing of ablative materials and prevention technique for corrosion process. C215.3 Illustrate the potentialities of various high energy materials and material selection procedure DEPARTMENT AE SEMESTER 4 COURSE COURSE COURSE ID C216 COURSE TITLE Turbomachines COURSE OUTCOME STATEMENTS COURSE OUTCOME STATEMENTS NO Understand energy transfer and energy transformation in turbomachines. C216.1 Understand energy transfer and energy transformation in turbomachines. C216.3 Relate the concepts to turbomachines to hydraulic pumps and turbines. DEPARTMENT AE SEMESTER 4 COURSE COURSE COURSE ID C217 COURSE OUTCOME MATERIAL TESTING LAB COURSE OUTCOME STATEMENTS COURSE OUTCOME STATEMENTS COURSE OUTCOME STATEMENTS NO Understand the different material properties, heat treatment processes, and demonstrate microstructures of the materials. C217.2 Perform destructive and non-destructive test on materials to find different strength	COURSE TITLE		Aircraft Material Science							
C215.1 Understand the basics and properties of different aircraft materials like metallin non-metallic, alloys and super alloys, composites, ablative materials. C215.2 Describe the processing of ablative materials and prevention technique for corrosion process. C215.3 Illustrate the potentialities of various high energy materials and material selection procedure DEPARTMENT AE SEMESTER 4 COURSE COURSE COURSE ID COURSE ID COURSE ID COURSE ID COURSE OUTCOME C216 COURSE OUTCOME COURSE OUTCOME STATEMENTS COURSE OUTCOME STATEMENTS COURSE OUTCOME STATEMENTS NO Understand energy transfer and energy transformation in turbomachines. C216.2 Compute the performance characteristics of turbomachines. C216.3 Relate the concepts to turbomachines to hydraulic pumps and turbines. C217 COURSE OUTCOME MATERIAL TESTING LAB COURSE OUTCOME STATEMENTS OEPARTMENT AE SEMESTER 4 COURSE OUTCOME STATEMENTS OURSE OUTCOME MATERIAL TESTING LAB COURSE OUTCOME STATEMENTS OEPARTMENT AE SEMESTER 4 COURSE OUTCOME STATEMENTS COURSE OUTCOME STATEMENTS OURSE OUTCOME STATEMENTS	COURSE OUTCO	OME			COURSE OUT	COME STATE	EMENTS			
C215.2 Describe the processing of ablative materials and prevention technique for corrosion process. C215.3 Illustrate the potentialities of various high energy materials and material selection procedure DEPARTMENT AE SEMESTER 4 COURSE COURSE ID C216 COURSE TITLE Turbomachines COURSE OUTCOME SEMESTER 4 COURSE OUTCOME STATEMENTS COURSE OUTCOME SEMESTER 4 COURSE OUTCOME STATEMENTS COURSE OUTCOME STATEMENTS NO C216.2 Compute the performance characteristics of turbomachines C216.3 Relate the concepts to turbomachines to hydraulic pumps and turbines. DEPARTMENT AE SEMESTER 4 COURSE OUTCOME STATEMENTS OUNDERSENTER 4 COURSE OUTCOME STATEMENTS COURSE TITLE MATERIAL TESTING LAB COURSE OUTCOME STATEMENTS NO	C215.1		Understand the basics and properties of different aircraft materials like metal non-metallic, alloys and super alloys, composites, ablative materials.							
C215.3 Illustrate the potentialities of various high energy materials and material selection procedure DEPARTMENT AE SEMESTER 4 COURSE CODE 18AE46 COURSE ID C216 COURSE TITLE Turbomachines COURSE OUTCOME STATEMENTS COURSE OUTCOME STATEMENTS COURSE OUTCOME STATEMENTS NO Understand energy transfer and energy transformation in turbomachines. C216.2 Compute the performance characteristics of turbomachines C216.1 Understand energy transfer and energy transformation in turbomachines. C216.3 Relate the concepts to turbomachines to hydraulic pumps and turbines. DEPARTMENT AE SEMESTER 4 COURSE CODE 18AEL47A COURSE ID C217 COURSE TITLE MATERIAL TESTING LAB COURSE OUTCOME STATEMENTS OUNGES OUTCOME STATEMENTS OUNGES OUTCOME STATEMENTS NO Understand the different material properties, heat treatment processes, and demonstrate microstructures of the materials. C217.2 Perform destructive and non-destructive test on materials to find different strengths and characteristics of materials. COURSE ID C218 DEPARTMENT AE SEMESTER 4 COURSE COURSE COURSE OUTCOME STATEMENTS COURSE ID C218 <	C215.2		Describe the corrosion pro	proces	sing of ablative	materials and	l prevention tec	chnique for		
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C216.3Relate the concepts to turbomachines to hydraulic pumps and turbines.DEPARTMENTAESEMESTER4COURSE CODE18AEL47ACOURSE IDC217COURSE TITLEMATERIAL TESTING LABCOURSE OUTCOME STATEMENTSCOURSE OUTCOME STATEMENTSCOURSE OUTCOME STATEMENTSCOURSE OUTCOME NOUnderstand the different material properties, heat treatment processes, and demonstrate microstructures of the materials.Perform destructive and non-destructive test on materials to find different strengths and characteristics of materials.C217.3Perform destructive and interpret the results Graphically/mathematically.DEPARTMENTAESEMESTER4COURSE COURSE18AEL48COURSE IDC218 COURSE IDCOURSE TITLECOMPUTER AIDED AIRCRAFT DRAWINGCOURSE IDC218COURSE IDC218	C216.2		Compute the	perfor	mance character	istics of turb	omachines			
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C217.3 Tabulate the readings and interpret the results Graphically/mathematically. DEPARTMENT AE SEMESTER 4 COURSE CODE 18AEL48 COURSE ID C218 COURSE TITLE COMPUTER AIDED AIRCRAFT DRAWING	C217.2		Perform dest strengths and	ructive l chara	e and non-destruction of materistics of materiatics and materiatics of materiatics and materia	ctive test on 1 crials.	materials to find	d different		
DEPARTMENT AE SEMESTER 4 COURSE CODE 18AEL48 COURSE ID C218 COURSE TITLE COMPUTER AIDED AIRCRAFT DRAWING COURSE TITLE COMPUTER AIDED AIRCRAFT DRAWING COURSE TITLE	C217.3		Tabulate the	readin	gs and interpret t	the results G	aphically/math	ematically.		
DEPARTMENT AE SEMESTER 4 COURSE 18AEL48 COURSE ID C218 COURSE TITLE COMPUTER AIDED AIRCRAFT DRAWING COURSE TITLE COMPUTER AIDED AIRCRAFT DRAWING COURSE TITLE										
COURSE TITLE COMPUTER AIDED AIRCRAFT DRAWING	DEPARTMENT	AE	SEMESTER	4	COURSE CODE	18AEL48	COURSE ID	C218		
	COURSE TITLE		COMPUTER	AIDED	AIRCRAFT DRAV	VING				
COURSE OUTCOME COURSE OUTCOME STATEMENTS	COURSE OUTCO	OME			COURSE OUT	COME STATE	EMENTS			



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C218.1		Understand t	Understand the design/assembly drawings					
C218.2		Familiarize t	he tool	ls in standard CA	D package			
C218.3		Draw orthog	raphic	projections and	sectional vie	ws of standard	primitives,	
C218.4		thread forms Model parts	, joints	and couplings a sembly of aircrat	nd Machine	components		
0210.4		Woder parts						
DEPARTMENT	AE	SEMESTER	6	COURSE CODE	18AE61	COURSE ID	C311	
COURSE TITLE		AIRCRAFT P	RFOR	MANCE				
COURSE OUTCO	ME			COURSE OUT	COME STAT	EMENTS		
C311.1		Understand the basics aircraft performances						
C311.2		Choose the a flights	ircraft	performances in	steady accel	erated and unac	ccelerated	
C311.3		Analyze the	aircraf	t manoeuvre per	formance.			
			-					
DEPARTMENT	AE	SEMESTER	6	COURSE CODE	18AE62	COURSE ID	C312	
COURSE TITLE		AIRCRAFT ST	RUCTI	URES - II				
COURSE OUTCO	ME			COURSE OUT	COME STAT	EMENTS		
C312.1		Apply the co	oncepts	of thin-walled s	tructures in b	ending and she	ar flow.	
C312.2		Identify the s	structu	ral failures and it	ts design con	cepts		
C312.3		Evaluate the	stress	in wings and fus	elage frames			
DEDADTAGNIT	A.F.	CENALCTED	6	COURCE	194562		C212	
DEPARTIVIENT	AL	SEIVIESTER	O	CODE	TOAEDS	COORSE ID	C315	
COURSE TITLE		FINITE ELEM	ENT M	IETHOD				
COURSE OUTCO	ME			COURSE OUT	COME STAT	EMENTS		
C313.1		Understand t	he fun	damentals of FE	M, importan	ce of discretisat	ion process by	
C313.2		Deduce the g	governi	ing equations for	basic steps in bars, beams	truss etc due to	o different	
		loading and	bounda	ary conditions		,		
C313.3		Analyze the	two- a	nd three-dimensi	onal element	s, Isoperimetric	e, Axisymmetric	
		Elements and	d field	problems.				
DEPARTMENT	AF	SEMESTER	6	COURSE	18AF642	COURSE ID	C314	
				CODE				
COURSE TITLE		NUMERICAL	METH	ODS				
COURSE OUTCO	ME			COURSE OUT	COME STAT	EMENTS		
C314.1		Apply the ba	sic cor	ncepts of numeri	cal methods			
C314.2		Compute the integration.	Eigen	values, Eigen ve	ectors, nume	rical differentia	tion and	



C314.3		Perform the curve fitting and root finding.						
				-	_			
DEPARTMENT	AE	SEMESTER	6	COURSE CODE	18AE653	COURSE ID	C315	
COURSE TITLE		BASICS OF R	OCKET	S & MISSILES				
COURSE OUTCO	DME	COURSE OUTCOME STATEMENTS						
C315.1		Identify the t	ypes o	f space launch v	ehicles and n	nissiles.		
C315.2		Distinguish t	he soli	d and liquid prop	pellant motor	·S.		
C315.3		Classify diffe	erent ty	pes of materials	used for roc	kets and missile	es.	
				ſ		1		
DEPARTMENT	AE	SEMESTER	6	COURSE	18AEL66	COURSE ID	C316	
COURSE TITLE		AIRCRAFT PE	KOPUL	SION LAB				
	DIVIE			COURSE OUT	COMESTATI	EMENIS		
NO		Understand t	he basi	c principle and t	heory of airc	raft propulsion	and heat	
C316.1		transfer.		e principie una t	incory of and	full propulsion	und neut	
C316.2		Demonstrate	and ta	bulate the proper	rties of comp	ressors, turbine	, measurement	
		of a flame an	id beha	vior of flow thro	ough nozzle/	ducts.	,	
C316.3		Evaluate the performance of aircraft engines components.						
C316.4		Interpret the c	oncept	s and results bot	h orally and	written		
				1				
DEPARTMENT	AE	SEMESTER	6	COURSE CODE	18AEL67	COURSE ID	C317	
COURSE TITLE		AIRCRAFT STRUCTURES LAB						
COURSE OUTCO	DME			COURSE OUT	COME STATI	EMENTS		
C317.1		Understand a and extension	and det neter a	ermine the youn nd their deflection	g's modulus ons for variou	for materials us is loading cond	sing strain gauge itions.	
C317.2		Investigate th using beams	ne Max under	well's Reciprocations load con	al theorem an ditions.	nd Principle of	superposition	
C317.3		Compare the various end c	theore	tical and experir	nental results	s of beams and	columns with	
C317.4		Analyze and i	nterpre	t the theoretical	and experim	ental results for	beams and	
		oolumna	olumns					
		columns						
			•	0011005	404504			
DEPARTMENT	AE	SEMESTER	8	COURSE	18AE81	COURSE ID	C411	
DEPARTMENT	AE	SEMESTER	8 CLE DE	COURSE CODE SIGN	18AE81	COURSE ID	C411	
DEPARTMENT COURSE TITLE	AE	SEMESTER FLIGHT VEHI	8 CLE DE	COURSE CODE SIGN	18AE81		C411	
DEPARTMENT COURSE TITLE COURSE OUTCO NO	AE	SEMESTER FLIGHT VEHI	8 CLE DE	COURSE CODE SIGN COURSE OUT	18AE81	COURSE ID	C411	
DEPARTMENT COURSE TITLE COURSE OUTCO NO C411.1	AE	SEMESTER FLIGHT VEHI Enumerate th	8 CLE DE	COURSE CODE SIGN COURSE OUT	18AE81 COME STATI	COURSE ID EMENTS aircraft.	C411	
DEPARTMENT COURSE TITLE COURSE OUTCO NO C411.1 C411.2	AE	SEMESTER FLIGHT VEHI Enumerate th Relate thrust	8 CLE DE ne conc loadin	COURSE CODE SIGN COURSE OUT reptual design pr g, wing loading	18AE81 COME STAT ocess of the and power lo	COURSE ID EMENTS aircraft. pading in the de	C411 sign process.	
DEPARTMENT COURSE TITLE COURSE OUTCO NO C411.1 C411.2 C411.3	AE	SEMESTER FLIGHT VEHI Enumerate th Relate thrust Relate thrust	8 CLE DE ne conc loadin loadin	COURSE CODE SIGN COURSE OUT eeptual design pr g, wing loading g, wing loading	18AE81 COME STATE ocess of the stand power lo and power lo	COURSE ID EMENTS aircraft. pading in the de pading in the de	C411 sign process. sign process.	
DEPARTMENT COURSE TITLE COURSE OUTCO NO C411.1 C411.2 C411.3 C411.4	AE	SEMESTER FLIGHT VEHI Enumerate th Relate thrust Relate thrust Analyze the c	8 CLE DE ne conce loadin loadin lesign o	COURSE CODE SIGN COURSE OUT ceptual design pr g, wing loading g, wing loading of all component	18AE81 COME STATI ocess of the a and power lo	COURSE ID EMENTS aircraft. bading in the de bading in the de	C411 sign process. sign process.	
DEPARTMENT COURSE TITLE COURSE OUTCO NO C411.1 C411.2 C411.3 C411.4	AE	SEMESTER FLIGHT VEHI Enumerate th Relate thrust Relate thrust Analyze the c	8 CLE DE ne conc loadin loadin lesign o	COURSE CODE SIGN COURSE OUT eeptual design pr g, wing loading g, wing loading of all component	18AE81 COME STATE ocess of the stand power lo and power lo	COURSE ID EMENTS aircraft. pading in the de pading in the de	C411 sign process. sign process.	
DEPARTMENT COURSE TITLE COURSE OUTCO NO C411.1 C411.2 C411.3 C411.4 DEPARTMENT	AE	SEMESTER FLIGHT VEHI Enumerate th Relate thrust Relate thrust Analyze the c SEMESTER	8 CLE DE ne conce loadin loadin lesign o 8	COURSE CODE SIGN COURSE OUT eeptual design pr g, wing loading g, wing loading of all component COURSE CODE	18AE81 COME STATI ocess of the a and power lo and power lo is 18AE821	COURSE ID EMENTS aircraft. bading in the de bading in the de COURSE ID	C411 sign process. sign process. C412	



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COURSE OUTCO	OME			COURSE OUT	COME STATI	EMENTS	
C412.1	2.1 Understand the basic concepts of Avionics Systems in civil and military						
		aircrafts.					
C412.2		Interpret the working of various avionics systems in an aircraft.					
C412.3		Employ the understanding and use of microprocessors, data buses, display systems, avionics system architectures and system integration in effective analysis of avionics systems					
						1	1
DEPARTMENT	AE	SEMESTER	8	COURSE	18AE822	COURSE ID	C413
				CODE			
COURSE TITLE		BOUNDARY	LAYER	THEORY			
COURSE OUTCO	DME			COURSE OUT	COME STATI	EMENTS	
C413.1		Understand t	he con	cepts of boundar	y layer theor	У	
C413.2		Apply the basic concepts, physics, and mathematical descriptions of viscous flow.					
C413.3		Differentiate model.	betwee	en boundary laye	ers (laminar,	turbulent) and	boundary layer