COLLEGE : J - Engineering
DEPARTMENT: MAT SCI AND ENGR

CURRIC	COURSE NUM	TITLE	EFFECTIVE QUARTERS	QUARTER CREDITS	OVER-ALL MAX	DUP	GRD SYS	DED	HYPH	SUM	HNR	FEE	VLPA	IS	NW	ELECT	EMP	QSR	WRTNG	RESPONS COURSE	JOINT COURSES	OMIT
MSE	170	FUNDMNT MATERLS SCI FUNDAMENTALS OF MATERIALS SCIENCE	AUT/2009 - AUT/9999	4.0		.		.		.	.	.			Y							.
					LAST UPDT: 6/24/09 APPROVED: 6/15/99																	
		COMMENT:CHG PREQ																				
MSE	273	INTR MOLC ENG MATS INTRODUCTION TO MOLECULAR ENGINEERING OF INTERFACES AND SURFACES	WIN/2012 - AUT/9999	2.0		.		.		.	.	.			Y							.
					LAST UPDT:11/18/11 APPROVED:10/18/11																	
MSE	298	INTRO MODERN MTLS INTRODUCTION TO MODERN MATERIALS	SPR/2005 - AUT/9999	1.0		.		.		.	.	.										.
					LAST UPDT: 2/02/05 APPROVED: 1/31/05																	
MSE	310	INTRO MSE INTRODUCTION TO MATERIALS SCIENCE AND ENGINEERING	AUT/2002 - AUT/9999	3.0		.		.		.	.	.										.
					LAST UPDT: 8/14/08 APPROVED: 2/22/93																	
		COMMENT:WAS MSE 300;CHG CRDS,HRS,DESCR																				
MSE	311	INTEGRAT JR LAB I INTEGRATED JUNIOR LABORATORY I	AUT/2002 - AUT/9999	2.0		.		.		.	.	Y										.
					LAST UPDT: 9/15/11 APPROVED: 2/22/93																	
		COMMENT:WAS MSE 317;CHG TTLS,HRS,CD FEE TYPE:1 $35.00 BUDGET:069332 REV OBJ CD:943081																				
MSE	312	INTEGRAT JR LAB II INTEGRATED JUNIOR LABORATORY II	WIN/2003 - AUT/9999	2.0		.		.		.	.	Y										.
					LAST UPDT: 9/15/11 APPROVED: 2/22/93																	
		COMMENT:WAS MSE318;CHG TITLES,CR,DESCR FEE TYPE:1 $35.00 BUDGET:069332 REV OBJ CD:943081																				
MSE	313	INTEGRAT JR LAB III INTEGRATED JUNIOR LABORATORY III	SPR/2003 - AUT/9999	2.0		.		.		.	.	Y										.
					LAST UPDT: 9/15/11 APPROVED: 2/22/93																	
		COMMENT:WAS MSE 319;CHG TITLE,CR,DESCR FEE TYPE:1 $35.00 BUDGET:069332 REV OBJ CD:943081																				
MSE	321	THERM & PHAS EQUIL THERMODYNAMICS AND PHASE EQUILIBRIUM	AUT/2002 - AUT/9999	4.0		.		.		.	.	.										.
					LAST UPDT: 8/14/08																	
		COMMENT:WAS MSE 322;CHG TTLS,CRDS,CD																				
MSE	322	KINETIC MICRO EVOL KINETICS AND MICROSTRUCTURAL EVOLUTION	WIN/2003 - AUT/9999	4.0		.		.		.	.	.										.
					LAST UPDT:10/25/06 APPROVED: 6/24/02																	
		COMMENT:WAS MSE315;CHG TITLE,DESC.PRER																				

COLLEGE : J - Engineering
DEPARTMENT: MAT SCI AND ENGR

CURRIC	COURSE NUM	TITLE	EFFECTIVE QUARTERS	QUARTER CREDITS	OVER-ALL MAX	DUP	GRD SYS	DED	HYPH	SUM	HNR	FEE	VLPA	IAS	NW	ELECT	EMP	QSR	WRTNG	RESPONS COURSE	JOINT COURSES	OMIT
MSE	331	CRYSTALLOG & STRUCT CRYSTALLOGRAPHY AND STRUCTURE	AUT/2002 - AUT/9999	3.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.			.
		COMMENT:WAS MSE 314; CHG TTLS,CRDS,CD			LAST UPDT: 8/14/08 APPROVED: 2/22/93																	
MSE	333	MTLS CHARACTERIZ MATERIALS CHARACTERIZATION	SPR/2012 - AUT/9999	3.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.			.
		COMMENT:CHG PREQ			LAST UPDT: 6/18/12 APPROVED: 6/24/02																	
MSE	342	MATERIALS PROCESS I MATERIALS PROCESSING I	WIN/2003 - AUT/9999	3.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.			.
		COMMENT:WAS MSE421;CHG TITLE,DESCR,PRE			LAST UPDT:10/25/06 APPROVED: 6/24/02																	
MSE	351	ELEC PROP MATERIALS ELECTRONIC PROPERTIES OF MATERIALS	WIN/2011 - AUT/9999	3.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.			.
		COMMENT:CHG TITLES			LAST UPDT:12/15/09																	
MSE	352	PROP OF MATERIALS FUNCTIONAL PROPERTIES OF MATERIALS I	SPR/2003 - AUT/9999	3.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.			.
					LAST UPDT: 6/25/02 APPROVED: 6/24/02																	
MSE	362	MECH BEHAV MTLS I MECHANICAL BEHAVIOR OF MATERIALS I	SPR/2003 - AUT/9999	3.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.			.
		COMMENT:WAS MSE316;CHG TITLE,CR,DES,PR			LAST UPDT: 8/14/08 APPROVED:11/17/83																	
MSE	421	STUDIES IN THERMO CASE STUDIES IN THERMODYNAMICS	WIN/2003 - AUT/9999	3.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.			.
		COMMENT:CHG TITLES,DESCRIPT,PREREQ.			LAST UPDT:10/25/06 APPROVED:11/17/83																	
MSE	431	FAILURE ANALYSIS FAILURE ANALYSIS AND DURABILITY OF MATERIALS	AUT/2007 - AUT/9999	3.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.			.
		COMMENT:CHG TITLES, PREQ			LAST UPDT: 8/14/08 APPROVED: 4/19/75																	
MSE	442	MTLS PROCESSING II MATERIALS PROCESSING II	AUT/2002 - AUT/9999	3.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.			.
		COMMENT:WAS CER E 421;CHG CRDS,TTLS,CD			LAST UPDT: 8/06/08 APPROVED: 3/18/71																	

COLLEGE : J - Engineering
DEPARTMENT: MAT SCI AND ENGR

CURRIC	COURSE NUM	TITLE	EFFECTIVE QUARTERS	QUARTER CREDITS	OVER-ALL MAX	DUP	GRD SYS	DED	HYPH	SUM	HNR	FEE	VLPA	IAS	NW	ELECT	ECMP	QSR	WRTNG	RESPONS COURSE	JOINT COURSES	OMIT
MSE	443	PROCESS PRINCIPLES PROCESS PRINCIPLES IN FERROUS AND NON-FERROUS MATERIALS PRODUCTION	AUT/2009 - AUT/9999	3.0		.		.			.	.	.	.	.	.	.	.	.			.
					LAST UPDT: 3/18/09 APPROVED: 9/22/83																	
		COMMENT:CHG TITLES, DESC																				
MSE	450	MAGNETIC MATERIALS MAGNETISM, MAGNETIC MATERIALS, AND RELATED TECHNOLOGIES	SPR/2013 - AUT/9999	3.0		.		.			.	.	.	.	.	.	.	.	.			.
					LAST UPDT: 5/16/12 APPROVED: 5/15/12																	
MSE	452	PROPERTIES MTLS II FUNCTIONAL PROPERTIES OF MATERIALS II	WIN/2003 - AUT/9999	4.0		.		.			.	.	.	.	.	.	.	.	.			.
					LAST UPDT: 8/06/08 APPROVED: 9/20/79																	
		COMMENT:WAS CER E414;CHG TITLE,CR,DES,																				
MSE	462	MECH BEHAV MTLS II MECHANICAL BEHAVIOR OF MATERIALS II	SPR/2009 - AUT/9999	4.0		.		.			.	.	.	.	.	.	.	.	.			.
					LAST UPDT:10/22/08 APPROVED: 4/01/75																	
		COMMENT:CHG PREQ																				
MSE	463	CORROSN & WEAR MTLS CORROSION AND WEAR OF MATERIALS	SPR/2003 - AUT/9999	4.0		.		.			.	.	.	.	.	.	.	.	.			.
					LAST UPDT: 8/14/08 APPROVED: 7/10/69																	
		COMMENT:WAS METE432;CHG TITLES,CR,DESC																				
MSE	471	POLYMER SCI & ENGR INTRODUCTION TO POLYMER SCIENCE AND ENGINEERING	AUT/2002 - AUT/9999	3.0		.		.			.	.	.	.	.	.	.	.	.			.
					LAST UPDT: 8/14/08 APPROVED:12/21/88																	
		COMMENT:WAS MSE 433; CHG TTLS,DESCR,HR																				
MSE	473	NONCRYSTALLINE STATE NONCRYSTALLINE STATE	SPR/2003 - AUT/9999	4.0		.		.			.	.	.	.	.	.	.	.	.			.
					LAST UPDT: 8/06/08																	
		COMMENT:WAS CERE 411;CHG TITLE,DES,PRE																				
MSE	475	COMPOSITE MATERIALS INTRODUCTION TO COMPOSITE MATERIALS	AUT/2003 - AUT/9999	4.0		.		.			.	.	.	.	.	.	.	.	.			.
					LAST UPDT: 8/14/08																	
		COMMENT:WAS MSE423;CHG TITLE,DESC,PRER																				
MSE	477	HI-TEMP MATERIALS HIGH TEMPERATURE MATERIALS	SPR/2003 - AUT/9999	4.0		.		.			.	.	.	.	.	.	.	.	.			.
					LAST UPDT: 8/06/08																	
		COMMENT:WAS CERE470;CHG TITLE,DESC,PRE																				

COLLEGE : J - Engineering
DEPARTMENT: MAT SCI AND ENGR

CURRIC	COURSE NUM	TITLE	EFFECTIVE QUARTERS	QUARTER CREDITS	OVER-ALL MAX	DUP	GRD SYS	DED	HYPH	SUM	HNR	FEE	VLPA	IAS	NW	ELECT	ECMP	QSR	WRTNG	RESPONS COURSE	JOINT COURSES	OMIT
MSE	481	NANOSTRUCTURES	WIN/2005 - AUT/9999	3.0		.		.		.	.	.	.	.	.	.	.	.	.			.
		SCIENCE AND TECHNOLOGY OF NANOSTRUCTURES																				
					LAST UPDT:12/23/03 APPROVED:12/22/03																	
MSE	484	MATERIALS CHEMISTRY	SPR/2006 - AUT/9999	3.0		.		.		.	.	.	.	.	Y	.	.	.	.	CHEM 484	CHEM 484	.
		MATERIALS CHEMISTRY																				
					LAST UPDT: 6/10/08 APPROVED: 2/24/06																	
		COMMENT:WAS MSE 371																				
MSE	485	ELECTRNC PACKAGING	WIN/1997 - AUT/9999	3.0		.		.		.	.	.	.	.	.	.	.	.	.	M E 485	M E 485	.
		INTRODUCTION TO ELECTRONIC PACKAGING AND MATERIALS																				
					LAST UPDT: 6/14/96 APPROVED: 4/29/96																	
MSE	486	IC TECHNOLOGY	AUT/2012 - AUT/9999	3.0		.		.		.	.	.	.	.	.	.	.	.	.	MSE 486	E E 486	.
		FUNDAMENTALS OF INTEGRATED CIRCUIT TECHNOLOGY																				
					LAST UPDT: 5/31/12 APPROVED: 1/03/01																	
		COMMENT:EMAIL PREQ CHG																				
MSE	487	ELECT PKG LAB	WIN/2000 - AUT/9999	1.0		.		.		.	.	Y	.	.	.	.	.	.	.	M E 487	M E 487	.
		LABORATORY IN ELECTRONIC PACKAGING AND MATERIALS																				
					LAST UPDT: 7/23/04 APPROVED: 2/03/99																	
					FEE TYPE:1 $75.00 BUDGET:069397 REV OBJ CD:943081																	
MSE	491	DESIGN MTLS ENGRG I	SPR/2007 - AUT/9999	2.0		.		.		.	.	.	.	.	.	.	.	.	.			.
		DESIGN IN MATERIALS ENGINEERING I																				
					LAST UPDT:10/26/09																	
		COMMENT:CHG TITLES, CREDITS, PREQ																				
MSE	492	DESIGN MTLS ENGRG II	SPR/2007 - AUT/9999	2.0		.		.		.	.	.	.	.	.	.	.	.	.			.
		DESIGN IN MATERIALS ENGINEERING II																				
					LAST UPDT: 1/24/07 APPROVED:12/11/02																	
		COMMENT:CHG CREDITS, DESC																				
MSE	497	UNDERGRAD RESEARCH	SPR/2005 - AUT/9999	1.0-05.0	12.0	.	CR/NC	.		.	.	.	.	.	.	.	.	.	.			.
		UNDERGRADUATE RESEARCH																				
					LAST UPDT:12/21/04 APPROVED:12/24/04																	
MSE	498	SPECIAL TOPICS	AUT/1984 - AUT/9999	1.0-05.0	8.0	Y		.		.	.	Y	.	.	.	.	.	.	.			.
		SPECIAL TOPICS																				
					LAST UPDT:10/30/06 APPROVED:11/17/83																	
					FEE TYPE:1 $50.00 BUDGET:069332 REV OBJ CD:943081																	

COLLEGE : J - Engineering
DEPARTMENT: MAT SCI AND ENGR

CURRIC	COURSE NUM	TITLE	EFFECTIVE QUARTERS	QUARTER CREDITS	OVER-ALL MAX	DUP	GRD SYS	DED	HYPH	SUM	HNR	FEE	VLPA	IAS	NW	ELECT	EMP	CQSR	WRTNG	RESPONS COURSE	JOINT COURSES	OMIT
MSE	499	SPECIAL PROJECT SPECIAL PROJECT	AUT/1992 - AUT/9999	0.0	5.0	Y		.	11	.	.	.	.	.	.	.	.	.	.	.	.	.
					LAST UPDT: 2/24/95					APPROVED:11/19/87												
		COMMENT:CHANGE DESCRIPTION																				
MSE	501	ADV PROC. INORG MAT ADVANCED PROCESSING OF INORGANIC MATERIALS	AUT/1999 - AUT/9999	3.0	.			.		.	.	.	.	.	.	.	.	.	.	.	.	.
					LAST UPDT:10/30/06					APPROVED:10/27/89												
		COMMENT:CHANGE TITLE & DESCRIPTION																				
MSE	502	SOL-GEL PROCESSING SOL-GEL PROCESSING	AUT/1999 - AUT/9999	3.0	.			.		.	.	.	.	.	.	.	.	.	.	.	.	.
					LAST UPDT: 2/08/99					APPROVED: 2/03/99												
MSE	504	INTRO TO MEMS INTRODUCTION TO MICROELECTRO MECHANICAL SYSTEMS	AUT/2001 - AUT/9999	4.0	.			.		.	.	.	.	.	.	.	.	.	.	E E	502 M E 504	.
					LAST UPDT:10/30/06					APPROVED: 5/21/01											E E 502	
		COMMENT:CHANGE JOINT STATUS																				
MSE	510	BONDING & STRUCTURE BONDING, CRYSTALLOGRAPHY, AND SYMMETRY-RELATED PROPERTIES OF MATERIALS	AUT/2004 - AUT/9999	3.0	.			.		.	.	.	.	.	.	.	.	.	.	.	.	.
					LAST UPDT:12/01/03					APPROVED:10/01/89												
		COMMENT:CHANGE DESC,TITLES																				
MSE	512	TRANSM ELC MICRSCPY EXPERIMENTAL TRANSMISSION ELECTRON MICROSCOPY	WIN/1990 - AUT/9999	3.0	.			.		.	.	.	.	.	.	.	.	.	.	.	.	.
					LAST UPDT:10/30/06					APPROVED: 6/27/85												
		COMMENT:CHG DESC																				
MSE	513	TEM LAB TRANSMISSION ELECTRON MICROSCOPY LABORATORY	WIN/1990 - AUT/9999	2.0	.			.		.	.	.	.	.	.	.	.	.	.	.	.	.
					LAST UPDT:10/30/06					APPROVED: 6/27/85												
		COMMENT:CHG TITLES, DESC																				
MSE	515	ADV TEM ADVANCED TRANSMISSION ELECTRON MICROSCOPY	SPR/1990 - AUT/9999	3.0	.			.		.	.	.	.	.	.	.	.	.	.	.	.	.
					LAST UPDT: 0/00/00					APPROVED:10/01/89												
MSE	518	ADVANCED MINERALOGY ADVANCED MINERALOGY	AUT/2009 - AUT/9999	3.0	.			.		.	.	.	.	.	.	.	.	.	.	ESS	537 ESS 537	.
					LAST UPDT: 8/12/09					APPROVED: 3/01/90												
		COMMENT:CHG JT STATUS																				

COLLEGE : J - Engineering
DEPARTMENT: MAT SCI AND ENGR

CURRIC	COURSE NUM	TITLE	EFFECTIVE QUARTERS	QUARTER CREDITS	OVER-ALL MAX	DUP	GRD SYS	DED	HYPH	SUM	HNR	FEE	VLPA	I&S	NW	ELECT	EMP	EQSR	WRTNG	RESPONS COURSE	JOINT COURSES	OMIT
MSE	520	SEMINAR SEMINAR	SPR/1984 - AUT/9999	1.0	6.0	Y	CR/NC	.		.	.	.	.	.	.	.	.	.	.			.
					LAST UPDT:10/30/06 APPROVED:11/17/83																	
		COMMENT:WAS CER E/MET E 520																				
MSE	524	APP RATE PHENOMENA APPLIED RATE PHENOMENA	AUT/1977 - AUT/9999	3.0	.		.	.		.	.	.	.	.	.	.	.	.	.			.
					LAST UPDT:10/30/06 APPROVED: 3/30/77																	
MSE	525	KINETICS & PHASE TR KINETICS AND PHASE TRANSFORMATIONS	SPR/2000 - AUT/9999	3.0	.		.	.		.	.	.	.	.	.	.	.	.	.			.
					LAST UPDT:10/30/06 APPROVED:10/27/89																	
		COMMENT:CHG TITLE & DESCRIPTION																				
MSE	528	PHYSICS VLSI FAB PHYSICS AND MODELING OF VLSI FABRICATION	AUT/2005 - AUT/9999	4.0	.		.	.		.	.	.	.	.	.	.	.	.	.	E E	528 E E 528	.
					LAST UPDT: 5/26/05 APPROVED: 5/23/05																	
MSE	541	DEFECTS IN MATERIALS DEFECTS IN MATERIALS	WIN/2001 - AUT/9999	3.0	.		.	.		.	.	.	.	.	.	.	.	.	.			.
					LAST UPDT:10/30/06 APPROVED:10/27/89																	
		COMMENT:CHANGE TITLES AND PREREQS																				
MSE	550	MAGNETIC MATERIALS MAGNETISM, MAGNETIC MATERIALS, AND RELATED TECHNOLOGIES	SPR/2012 - AUT/9999	3.0	.		.	.		.	.	.	.	.	.	.	.	.	.			.
					LAST UPDT: 5/15/12 APPROVED: 2/26/03																	
		COMMENT:CHG DESC																				
MSE	555	BIOMIMETICS BIOMIMETICS: BIOINSPIRED DESIGN AND PROCESSING OF MATERIALS	SUM/1996 - AUT/9999	4.0	.		.	.		.	.	.	.	.	.	.	.	.	.			.
					LAST UPDT: 4/23/97 APPROVED: 1/24/96																	
MSE	560	ELECT/PHOTONIC MTLS ORGANIC ELECTRONIC AND PHOTONIC MATERIALS/POLYMERS	SPR/2005 - AUT/9999	3.0	.		.	.		.	.	.	.	.	.	.	.	.	.	MSE	560 CHEM 564	.
					LAST UPDT: 8/24/04 APPROVED: 8/20/04																	
MSE	562	INTRO ELECTRONC COMP INTRODUCTION TO ELECTRONIC COMPOSITES	SPR/1999 - AUT/9999	3.0	.		.	.		.	.	.	.	.	.	.	.	.	.	M E	562 M E 562	.
					LAST UPDT:10/30/06 APPROVED: 2/23/89																	
		COMMENT:CHANGE TITLE & DESCRIPTION																				
MSE	563	ADVANCED COMPOSITES ADVANCED COMPOSITES: DESIGN AND MANUFACTURING	SPR/1999 - AUT/9999	3.0	.		.	.		.	.	.	.	.	.	.	.	.	.	MSE	563 M E 563	.
					LAST UPDT: 2/23/99 APPROVED: 2/22/99																	

COLLEGE : J - Engineering
DEPARTMENT: MAT SCI AND ENGR

CURRIC	COURSE NUM	TITLE	EFFECTIVE QUARTERS	QUARTER CREDITS	OVER-ALL MAX	DUP	GRD SYS	DED	HYPH	SUM	HNR	FEE	VLPA	I&S	NW	ELECT	EECMP	QSR	WRTNG	RESPONS COURSE	JOINT COURSES	OMIT
MSE	565	ELECTRON THEORY MTL ELECTRON THEORY OF MATERIALS	AUT/2010 - AUT/9999	3.0		.		.		.	.	.	.	.	.	.	.	.	.			.
					LAST UPDT: 5/26/10 APPROVED: 9/20/84																	
		COMMENT:10-12 PREQ CHG																				
MSE	568	ACT/SENSING MATR ACTIVE AND SENSING MATERIALS	AUT/2008 - AUT/9999	3.0		.		.		.	.	.	.	.	.	.	.	.	.	M E 568	M E 568	.
					LAST UPDT: 4/28/08 APPROVED: 4/15/08																	
MSE	571	POLYMERIC MATERIALS POLYMERIC MATERIALS	AUT/1992 - AUT/9999	3.0		.		.		.	.	.	.	.	.	.	.	.	.	BIOEN 571	BIOEN 571	.
					LAST UPDT:10/04/94 APPROVED: 5/29/92																	
MSE	598	ENGR MTLS PROJECT ENGINEERING MATERIALS PROBLEMS	AUT/1999 - AUT/9999	4.0		.		.		.	.	.	.	.	.	.	.	.	.			.
					LAST UPDT: 6/22/99 APPROVED: 6/21/99																	
MSE	599	SPEC TPCS MATLS SCI SPECIAL TOPICS IN MATERIALS SCIENCE	SUM/1987 - AUT/9999	1.0-05.0	5.0	Y		.		.	.	.	.	.	.	.	.	.	.			.
					LAST UPDT:10/30/06 APPROVED: 1/29/87																	
MSE	600	INDEPENDENT STUDY INDEPENDENT STUDY OR RESEARCH	WIN/1989 - AUT/9999	0.0	999.0	.		.	11	.	.	.	.	.	.	.	.	.	.			.
					LAST UPDT: 4/19/10 APPROVED: 6/09/88																	
		COMMENT:WAS CER E 600																				
MSE	700	MASTERS THESIS MASTER'S THESIS	AUT/1988 - AUT/9999	0.0	999.0	.		.	11	.	.	.	.	.	.	.	.	.	.			.
					LAST UPDT: 4/19/10 APPROVED: 6/09/88																	
MSE	800	DOCTORAL DISSERTATN DOCTORAL DISSERTATION	WIN/1989 - AUT/9999	0.0	999.0	.		.	11	.	.	.	.	.	.	.	.	.	.			.
					LAST UPDT: 4/19/10 APPROVED: 6/09/88																	
		COMMENT:WAS CER E 800																				