

## MSE 4754 - Electronic Packaging Assembly LECTURE SCHEDULE

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DATES FOR CLASSES	TOPIC	FACULTY
(Mondays) 12:05 – 12:50 PM Instruction Center 107		
January 9 <sup>th</sup>	SOP Introduction	Rao Tummala (ECE)
January 16 <sup>th</sup>	OFFICIAL SCHOOL HOLIDAY	
January 23 <sup>th</sup>	Chip Assembly - 1	Dan Baldwin (ME)
January 30 <sup>th</sup>	Chip Assembly - 2	Dan Baldwin (ME)
February 6 <sup>th</sup>	NO LECTURE	
February 13 <sup>th</sup>	Materials and encapsulation-1	C.P.Wong (MSE)
February 20 <sup>th</sup>	Materials and encapsulation-2	C.P.Wong (MSE)
February 27 <sup>th</sup>	Thermo-Mechanical modeling-1	Suresh Sitaraman (ME)
March 6 <sup>th</sup>	Thermo-Mechanical modeling-2	Suresh Sitaraman (ME)
March 13 <sup>th</sup>	MID TERM	
March 20 <sup>th</sup> - 24 <sup>th</sup>	SPRING BREAK	
March 27 <sup>th</sup>	Reliability Analysis	Jiamin Qu (ME)
April 3 <sup>rd</sup>	Moire Interferometry	Jiamin Qu (ME)
April 10 <sup>th</sup>	Thermal management	Y. Joshi (ME)
April 17 <sup>th</sup>	Electrical test	David Keezer (ECE)
April 24 <sup>th</sup>	Electrical test	David Keezer (ECE)
May 1 <sup>st</sup> - 5 <sup>th</sup>	<b>FINAL REPORT AND PRESENTATION</b>	

## LABORATORY EXPERIMENTS SCHEDULE

DATES OF LAB SESSIONS	TOPICS THAT WILL BE COVERED IN EACH WEEK  LOCATION	FACULTY, TA INVOLVED	MATERIAL TO COVER
Jan 10 <sup>th</sup> - 14 <sup>th</sup>	<b>Distribution of Handbooks, Group, Finalization of laboratory schedules.</b>	Dr. Kim	
Jan 18 <sup>th</sup> – 21 <sup>st</sup>	<b>No Lab.</b>		
Jan 24 <sup>th</sup> - 28 <sup>th</sup>	<b>Assembly:</b> Chip Qualifications of PB08-02, PB08-04, FA10-02 - Microscope -DAGE shear force measurements <b>383 MaRC</b>	Dr. Kim	
Jan 31 <sup>st</sup> - Feb 4 <sup>th</sup>	<b>Assembly:</b> Flip Chip Assembly - Set-up BTU oven for reflow temperature - Assemble chips - X-ray check <b>383 MaRC</b>	Dr. Kim	
Feb 7 <sup>th</sup> – 11 <sup>th</sup>	<b>Underfill dispensing of the samples</b> - Curing of the samples <b>383 MaRC</b>	Dr. Kim	
Feb 14 <sup>th</sup> - 18 <sup>th</sup>	<b>Underfill material characterization</b> - TGA and DSC measurements <b>378 Love Mfg Bldg.</b>	Dr. Kim, TA	
Feb 21 <sup>st</sup> -25 <sup>th</sup>	<b>Underfill material characterization</b> - DMA, TMA and Rheology measurements <b>378 Love Mfg Bldg.</b>	Dr. Kim, TA	
Feb 28 <sup>th</sup> – Mar 4 <sup>th</sup>	<b>Thermo Mechanical Modeling</b> Ansys model development for FA10 <b>2104 MRDC</b>	Dr. Kim, TA	
Mar 7 <sup>th</sup> – 11 <sup>th</sup>	<b>Thermo Mechanical Modeling</b> Ansys model development for FA10 <b>2104 MRDC</b>	Dr. Kim, TA	
Mar 14 <sup>th</sup> - 18 <sup>th</sup>	<b>MID SEMESTER NO LAB SESSION</b>		
Mar 21 <sup>st</sup> – 25 <sup>th</sup>	<b>SPRING BREAK, NO LAB SESSIONS</b>		
Mar 28 <sup>th</sup> – Apr 1 <sup>st</sup>	<b>Ultrasonic scanning</b> <b>383 MaRC</b>	Dr. Kim	
Apr 4 <sup>th</sup> – 8 <sup>th</sup>	<b>Ultrasonic scanning</b> <b>383 MaRC</b>	Dr. Kim,	
Apr 11 <sup>th</sup> – 15 <sup>th</sup>	<b>Section Polishing. Visual investigation.</b> <b>383 MaRC</b>	Dr. Kim	
Apr 18 <sup>th</sup> – 22 <sup>nd</sup>	<b>Section Polishing. Visual investigation.</b> <b>383 MaRC</b>	Dr. Kim	
Apr 25 <sup>th</sup> – 29 <sup>th</sup>	<b>383 MaRC</b>	Dr. Kim	
May 2 <sup>nd</sup> – 6 <sup>th</sup>	<b>Project Presentation and Final Report submission</b> <b>301 MaRC</b>	All Faculty	