

**Lecture and Lab Timetable**  
**2018/2019 Experimental Mechanics SESG6045**

	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
0900	<b>Registration, Overview and coursework introduction</b> Bldg 5 Room 2017 JMB	<b>White light imaging</b> Bldg 5 Room 2017 FP	<b>Data Analysis and Filtering</b> Bldg 5 Room 2017 FP	<b>Infra-red imaging</b> Bldg 5 Room 2017 JMB	<b>High speed imaging</b> Bldg 5 Room 2017 FP/JMB
1000	<b>Test machine principles</b> Bldg 5 Room 2017 PF	<b>White light imaging</b> Bldg 5 Room 2017 FP	<b>Data Analysis and Filtering</b> Bldg 5 Room 2017 FP	<b>Applications of thermography</b> Bldg 5 Room 2017 JMB	<b>ESPI</b> Bldg 5 Room 2017 FP
1100	Break	Break (1030 -1100)	Break	Break	Break
1130	<b>Strain gauges</b> Bldg 5 Room 2017 AF	<b>Digital image correlation and grid techniques</b> Bldg 5 Room 2017 JMB/FP	<b>DIC data processing</b> Computer Room 25/1007 DH/GH	<b>Thermoelastic stress analysis</b> Bldg 5 Room 2017 JMB	<b>Industrial applications</b> Bldg 5 Room 2017 RLB/ES
1300	Lunch	Lunch	Lunch	Lunch	Lunch
1400	<b>Laboratory *</b>	<b>Metrology and uncertainty quantification in DIC</b> Bldg 5 Room 2017 FP	<b>Virtual Fields Method</b> Bldg 5 Room 2017 FP	<b>Laboratory *</b>	<b>Practical data Processing for TSA</b> Computer Room 25/1007 JMB
1530	<b>Laboratory *</b>	Break	Break	<b>Laboratory *</b>	<b>Wrap-up and question and answer session</b> Bldg 5 Room 2017 JMB/FP/SQ
1600	<b>Laboratory *</b>	<b>Laboratory *</b>	<b>Practical – DIC, grid and VFM data processing</b> Computer Room 25/1007 DH/FP/SR	<b>1630 –workshop party – B13 Room 4079</b>	
1700	<b>Laboratory *</b>	<b>Laboratory *</b>	<b>Practical – DIC, grid and VFM data processing</b> Computer Room 25/1007 DH/FP/SR		

\*See separate timetable for schedule

**Lecturers JMB** – Professor Janice Barton, University of Southampton – module leader. **PF** – Peter Fuller, Instron. **AF** – Alan Fulbrook, Vishay Precision Group – Micro-Measurements, **FP** – Professor Fabrice Pierron, University of Southampton. **SQ** – Dr Simon Quinn, University of Southampton. **DH** – Dr Dave Hollis, LA Vision. **RLB** – Professor Richard Burguete, NPL. **ES** – Eszter Szigeti, Airbus, **SR** - Saran Ramachandran, University of Southampton.

### Laboratory Schedule

Monday 1400-1800 Test Machine Demonstration location TSRL, Pre-assignment B13/4079, strain gauge installation location Eustice Basement Laboratory, 05/1023

	<b>Servo mechanical test machine</b> Instron E PF, DAC,	<b>Pre-assignment</b> JMB	<b>Free</b>	<b>Strain gauge installation</b> AF, AFR, SQ
1400 -1440 Mon	Group 1	Group 2	Group 3	Groups 4,5,6
1440 -1520 Mon	Group 2	Group 3	Group 1	Groups 4,5,6
1520 -1600 Mon	Group 3	Group 1	Group 2	Groups 4,5,6
1600 -1640 Mon	Group 4	Group 5	Group 6	Groups 1,2,3
1640 -1720 Mon	Group 5	Group 6	Group 4	Groups 1,2,3
1720 -1800 Mon	Group 6	Group 4	Group 5	Groups 1,2,3

**Lecturer AFR** – Dr Andy Robinson, University of Southampton.

Tuesday 1600 -1800 Location TSRL

	<b>Camera set-up</b> Various targets on a bench- Manta 1- Frogstar -50 mm AM	<b>Instron A</b> DIC and strain gauge – Brazilian disc – High res 1- startec-Sigma 105 JMB	<b>Instron F</b> DIC with dog bone – Manta 2- TSA computer Sigma 105 AFR	<b>Instron C</b> DIC and strain gauge – Brazilian disc –high res – Sigma 105 Borrow camera, lens and computer from LAVision DAC	<b>Instron E</b> DIC with dog bone –Elite camera –DIC computer – Sigma 105 DH	<b>Camera set-up</b> Various targets on a bench –Manta 4 - Punakha - 50 mm FP
1600 -1640 Tues	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
1640 -1720 Tues	Group 2	Group 3	Group 1	Group 5	Group 6	Group 4
1720 -1800 Tues	Group 3	Group 1	Group 2	Group 6	Group 4	Group 5

**Lecturers DAC** – Dr Duncan Crump, **AM** – Dr Alex Marek - University of Southampton.

Thursday 1400 -1600 Location TSRL

	<b>Instron A</b> TSA – Brazilian disc AFR	<b>TSA Calibration</b> Dog Bone JMB	<b>IR NDE</b> Sandwich panel GO
1400 -1430 Thurs	Groups 1,2	Groups 3,4	Groups 5,6
1430 -1500 Thurs	Groups 5,6	Groups 1, 2	Groups 3, 4
1500-1530 Thurs	Groups 3,4	Groups 5, 6	Groups 1,2

**GO** – Geir Olafsson - University of Southampton