**DEPARTMENT OF APPLIED MECHANICS AND BIOMEDICAL ENGINEERING**

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**Specifications for Contact angle meter**

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| **Specification** | **Minimum requirement** |
| Measuring method | Sessile drop method |
| Analysis method | Automatic curve fit analysis |
| Optics | aberration-corrected imaging lens with precise manual focus adjustment |
| Measurement angle range | 0 - 180 degree |
| Measurement accuracy | ≤ 1 degree |
| Camera type | CMOS Sensor |
| Image Resolution in Pixels | 2592 x 1944 |
| Video system | CMOS sensor and suitable shielded cable of minimum 3 m length |
| Dispenser to camera positioning unit | Top view |
| Illumination mechanism | LED-based diffused lighting |
| Illumination Units | Fixed backlit LED illuminator and angled illuminator for top-view imaging |
| Liquid dispenser | Through motorised syringe pump; suitable for both motorised and mechanical type |
| Syringes | 50, 100 and 250 microlitre capacity |
| Temperature of test base | Adjustable from ambient to 100°C |
| Substrate/sample holder | rotatable in the range +/- 180° from horizontal position (total 360°)  Height adjustable |