

Assessment and subject description

Óbuda University		Institute of Microelectronics and Technology		
Kandó Kálmán Faculty of Electrical Engineering				
Subject name and code: Electronics Technology laboratory KMEET12AND, Credits: 2				
Full-time, Spring Semester				
Course: Electrical engineering				
Responsible:	Csikósné Dr. Pap Andrea	Teaching staff:	Gröller György ,Vékás Károly	
Prerequisites:				
Contact hours per week:	Lecture:	Class discussion:	Lab hours: 2	Tutorial:
Assessment and evaluation:	KMEET11AND			
Subject description				
<i>Aims:</i> To develop laboratorial skills in the field of PCB technology.				
<i>Topics to be covered:</i>				
Topics			Week	Lessons
Introduction, working and safety rules			1	3
Manufacturing: Double side, through hole plated PCB. drilling, making hole conductive			2	3
Photolithography, galvanic plating			3	3
Solder mask preparation and patterning			4	3
Assembly processes, soldering TH and SM devices			5	3
Design: Circuit diagram I, borders, finding parts, choosing encapsulation. Block processes,			6	3
Circuit diagram II Drawing a schematic: finding parts, choosing package footprint, wiring, block operations. Board module, practise			7	3
Routing, placing components. Auto routing, manual routing			8	3
Design Rule Check (DRC), practising. Demo			9	3
Assessment and evaluation				
Requirements of the mid-term mark:				
A successful design work		50%		
Report about PCB processes:		25%		
Final test		25%		
Suggested material				
http://www.uni-obuda.hu/users/grollerg/Electronic-technology/labor/Double%20side%20PCB-labor1-4.pdf				
Comment:				