



MODULE HANDBOOK DESCRIPTION

Module designation	<i>Power Quality (FBA4117)</i>
Semester(s) in which the module is taught	<i>5/ third year</i>
Person responsible for the module	<i>Sabar Nababan, S.T., M.T</i>
Language	<i>Indonesian</i>
Relation to curriculum	<i>Compulsory</i>
Teaching methods	<i>lectures, Small Group Discussion, Case Base Method</i>
Workload (incl. contact hours, self-study hours)	Contact Hours every week, each week of the 16 weeks/semester : <ul style="list-style-type: none"> • 2 x 50 minutes lecture (2 sks/credit) total Study hours = 100 minutes/week
Credit points	<i>2 (~ 3,2 ECTS)</i>
Required and recommended prerequisites for joining the module	
Module objectives/intended learning outcomes	<ol style="list-style-type: none"> 1. Students are able to explain the meaning of power quality, 2. Students are able to explain the frequency variations, 3. Students are able to explain the continuity of supply, 4. Students are able to explain the voltage control in distribution systems, 5. Students are able to explain the Voltage Dips and Short Supply Interruptions, 6. Students are able to explain the Voltage Fluctuations and Flicker, 7. Students are able to explain the Voltage and Current Unbalance, 8. Students are able to explain the Voltage and Current Harmonics, 9. Students are able to explain the overvoltages.

Content	<ol style="list-style-type: none"> 1. The meaning of power quality, 2. The frequency variations, 3. The continuity of supply, 4. The voltage control in distribution systems, 5. The Voltage Dips and Short Supply Interruptions, 6. The Voltage Fluctuations and Flicker, 7. The Voltage and Current Unbalance, 8. The Voltage and Current Harmonics, 9. The overvoltages.
Examination forms	<i>Essay test</i>
Study and examination requirements	<i>Homework = 15%,</i> <i>Mid Test = 35%,</i> <i>Final Test = 50%</i>
Reading list	<ol style="list-style-type: none"> 1. Angelo Baghini, "Hand Book of Power Quality", John Wiley and Sons, Ltd, 2008.