## **Sub Course Description: Eco-Balance**

Department	Industrial Engineering
Degree programme	<ul> <li>Environmental Technology &amp; Development</li> <li>Environmental Technology</li> </ul>
Sub module name	Eco-Balance
Sub module number	WI-B.732.2
Module name	Environmental Management, Eco-Balancing
Compulsory/ optional/ elective module	Compulsory module
Module coordinator	Prof. DrIng. Frank-Joachim Möller
Learning objectives	Students are used to different Eco-Balance software packages. They are enabled to extract process descriptions from the database included or to create and store processes on their own. The students are qualified to set up life cycle or other systems. They can calculate Inventories as well as impact assessments. They can make use of the different storage, import, export or graphical reporting functions offered by the software.
Module content	<ul> <li>Data modeling and data bases</li> <li>User interface and usability</li> <li>Create, and store Process decription</li> <li>Creating systems, especially product life cycles</li> <li>Calculating Inventories</li> <li>Calculating impact assessments</li> <li>Creating flow sheets and graphical results; import and export of data</li> </ul>
Course type (lecture, exercises, seminar, practical course)	0L - 0E - 0S - 2P
Recommended literature	<ul> <li>/1/ PRé Consultants(Ed.): Introduction to LCA with SimaPro 7. Version 4. Amersfoort, NL, 2006</li> <li>/2/ PRé Consultants(Eds.): SimaPro Tutorial. Amersfoort, NL, current edition</li> <li>/3/ PE Europe (Ed.): GaBi Manual. Im Selbstverlag. Leinfelden—Echterdingen, current edition</li> </ul>
Learning materials	computer programs
Method(s) of instruction/ media being used	hands-on, seminar
Level/ category	Bachelor
Which semester (winter/ summer term)	Winter term
Which semester during the programme	5 <sup>th</sup> . semester → Environmental Technology 7 <sup>th</sup> . semester → Environmental Technology & Development

Requirements for attendance	
Assessment (written/ oral test, paper, etc.)	See module
ECTS credits	3
Work load in:	30 h of contact hours 60 h of self-study
Usability of this module	Environmental Technology & Development Environmental Technology
Frequency of offer	biannual
Duration of module	1 semester
Place/ room	EAH Jena
Time	According to schedule
Language(s)	English