DOUBLE DEGREE AGREEMENT

between

KARLSRUHE INSTITUTE OF TECHNOLOGY

with legal domicile Karlsruhe Institute of Technology, Campus South, Kaiserstraße 12, 76131 Karlsruhe, Germany, represented by Prof. Dr. sc. tech. Dr. h.c. Horst Hippler (President) and Prof. Dr. Eberhard Umbach (President)

Hereinafter referred to as “KIT”,

and

LINKÖPING UNIVERSITY

with legal domicile Linköping University, SE-581 83 LINKÖPING, Sweden, represented by Prof. Dr. Helen Dannetun (Rector)

Hereinafter referred to as “LIU”,

both hereinafter referred to as “Party” or “Parties” in this Agreement.

Preamble

Whereas KIT and LIU both have received an Erasmus Charter that amongst others underline the ambition to develop high-quality collaborative educational programmes, by building on research and teaching strengths within individual Charter member institutions.

Whereas KIT and LIU both have a long tradition of academic cooperation in the field of engineering as well as Erasmus Bilateral Agreements, that have been the basis for an active student exchange.

This Agreement stipulates the prerequisites and requirements for a Double Degree within the subject areas “Business Engineering” and “Industrial Engineering and Management” respectively.

Both Parties hereby agree as follows:
Article 1 – Aim of the Agreement
This Agreement defines the requirements and obligations of KIT and LIU in establishing a Double Degree Programme. The Programme, developed and organised jointly by the parties, leads to two recognised Master’s degree certificates, one from the student’s home institution and one from the host institution.

Article 2 – Scope of the Agreement and definitions
The term ‘Double Degree Programme’ refers to LIU’s last two years of the five-year track at Engineering – Ingenjör level (300 ECTS credits) and to both parties’ two-year track at Master’s level (120 ECTS credits) leading to the corresponding degree issued by each party. A combination of one engineering and one Master’s degree from two different institutions is also possible for LIU students. In that case the student following an engineering programme at LIU will follow a Master’s degree programme at KIT.

This Agreement concerns the implementation of the Double Degree Programme with two possible tracks as represented hereafter:

The contents and the curriculum of the Programme are specified in Appendix 1 to this Agreement.

This Agreement specifies the rights and responsibilities of both parties, and the terms under which students from KIT and from LIU may be granted, upon successful fulfilment of the Programme and of all requirements for graduation at each institution, the academic degrees and diplomas of comparable academic levels from both institutions.

Both parties agree to the following general forms of cooperation and general requirements for all students participating under this Agreement.

Article 3 – Extent of the Programme
The students of one of the two ‘Double Degree Programme’ tracks study at both institutions according to the curriculum and mobility plan defined in Appendix 1.
The aim of both parties is that the student will spend at least two semesters at the host institution as well as the final Master’s thesis under joint supervision. The languages of instruction of the Double Degree Programme are English and German.

The Parties review the Programme’s curriculum annually and make the necessary changes. Number of students participating in the Programme will be negotiated and determined by the parties on a yearly basis.

**Article 4 – Student Admission**

The admission of students to the Programme will be conducted in accordance with the following principles:

- The parties will agree on the application procedure, including application deadlines, selection criteria and student quota, which will be disclosed on the websites of the Programme at both institutions.
- The students must meet the admission criteria of the respective degree programmes of both institutions. This includes, for Karlsruhe, a proof of German language proficiency according to the “Rahmenordnung über Deutsche Sprachprüfungen für das Studium an deutschen Hochschulen (RO-DT)” or equivalent before the German degree can be issued.
- Students apply to the Programme at their home institution and the home institution is responsible for screening the applications and providing the host institution with a list of selected and eligible candidates. The applications are submitted by the student’s home institution to the host institution and letters of acceptance are sent from the host institution to the students.
- Students are selected and admitted to the Programme based on their academic results, prerequisite requirements, motivation and language skills. Students must demonstrate a good command of spoken and written English and German.
- Prerequisite for the mobility is that the student has successfully completed a sufficient number of credits according to the rules at the home institution.
- No tuition fees are required at the host institution for students participating in the Programme as long as they are regular students of the home institution independent of their nationality (EU member state or third country nationals).

**Article 5 – Rights and Status of the Students**

Students participating under this Agreement will be enrolled as degree students at their home institution and, for the time of their stay there, also at the host institution. However, if applicants do not comply with the Bachelor of Science requirements at the moment of their application to a Programme leading to a Master’s degree or equivalent, their admission will be a conditional one. It will become definitive as soon as the Bachelor’s degree certificate or equivalent will be produced.

Students will have the same rights and obligations as degree students in the respective institutions.

During the mobility, students will be responsible for covering the travel costs to the host country and living costs during their stay, including accommodation, books, equipment,
consumables, language tuition prior to the commencement of coursework (where necessary), health and travel insurance, student union fee (if applicable) and other personal expenses arising from the exchange.

Students participating in the Programme will be entitled to participate in any introductory programme that may customarily be arranged for international students at the host institution.

**Article 6 - Rights and obligations of the parties**

The host institution will render assistance to the incoming students in finding appropriate accommodation but an accommodation can not be guaranteed.

In order to provide the students full exposure to all aspects of the European dimension, the participating institutions under this Agreement will help students to have the possibility to take at least one European language and/or culture course during the study period at the host institution.

**Article 7 – Study Plan and Course of Study**

Conditions regarding the course of studies are specified in Appendix 1, in the respective study and examination regulations, as well as in the individual Learning Agreement, signed by representatives of the two institutions and the student.

Each student will propose an individual study plan made according to the agreed curriculum for the total duration of the Programme. This study plan will be reviewed and, if needed, modified prior to final admission. The Learning Agreement must be established and signed by both institutions prior to arrival at the host institution. This agreement may be revised at any time in written form with seal of approval from the academic representatives of the two institutions.

**Article 8 – Final Degree Project**

The final degree project (Master’s thesis) will be performed according to the rules and regulations of both institutions. Co-supervision of the project is required. The subject of the final degree project must always receive an advance approval from a faculty member of the host as well as the home institution. The final degree project is normally carried out in the country of the host institution, but exceptions may be negotiated on a case-by-case basis.

The final degree project results in a report written in the language required at the host institution. In addition a concise abstract in English will be required if the language of the project is either German or Swedish.

**Article 9 – Control of results**

The parties agree that exams/courses will be graded and credits awarded in line with the ECTS Users’ Guide according to the rules of the institution where the exams/courses are carried out.
Article 10 - Delivery of the academic degrees
Students successfully completing their studies of the Double Degree Programme obtain two degree certificates, one issued by the home institution and one issued by the host institution. The students also receive two Diploma Supplements related to their (respective) degrees.

Article 11 - Academic and administrative representatives
Each institution will nominate an academic representative for the Programme. These representatives will be responsible for following the Programme and for ensuring that measures are taken in accordance with this Agreement. The representatives will provide advisory and other academic and administrative services to students participating under this Agreement. Name as well as contact details for the representatives are in given in the Appendix 1.

Article 12 – Quality assurance
Both parties will implement their local evaluation systems for courses and programmes. The feedback and future improvements will be treated at the annual meetings of the persons responsible for the Double Degree Programme.

Article 13 - Terms of Agreement
This Agreement will come into effect with winter term 2011 - 2012 and will continue by common agreements through summer term 2016. The agreement may be extended for another period of five years by mutual consent of the parties. Either institution may terminate this Agreement, provided that written notice of the intent is given at least twelve months prior to termination. Commitments already in progress shall be fulfilled.

Article 14 - Amendments or changes
Amendments or changes to this Agreement will be made in writing and signed by the duly authorised representatives of the institutions.

Amendments or changes to Appendix 1 of this Agreement will be made in writing and signed by the duly authorised representatives of the institutions at the Department/Institute level only.

The parties agree to solve in a friendly manner any controversy rising from the interpretation of the present Agreement.

In case the controversy cannot be resolved, the claim will be submitted for arbitration; each party will appoint a member of the arbitration panel, and one member will be chosen by mutual consent.

This Agreement has been signed in two originals in English, of which each institution has taken one.

Date:                                    Date:
Appendix 1

The structure of the Master’s Programme in Business Engineering (M.Sc.) at KIT and the Master’s Programme in Industrial Engineering and Management (M.Sc.) at LIU are described below (the structure of the Civilingenjör Programme in Industrial Engineering and Management at LIU is omitted as KIT Double Master students cannot be granted access to it).

1. The structure of the Master’s Programme in Business Engineering (M.Sc.) at KIT

The Master’s programme in Business Engineering (M.Sc.) has 4 terms and consists of 120 ECTS credit points (CP) including a Master’s thesis. The Master’s programme builds on the scientific qualifications of the Bachelor’s degree acquired at KIT or at other academic institutions. Minimum requirements for being admitted to the Master’s Programme at KIT include a total of 20 ECTS CP in the subjects mathematics, statistics and operations research.

Figure 1 shows the structure of the study programme made up of 5 compulsory subjects packaged in 7 modules, as well as 2 elective modules that might also comprise either Sociology or Law. Additionally, at least 2 seminars have to be attended.

It is left to the student’s individual curriculum (taking into account the examination and module regulations), in which semester the chosen modules will be started and completed. However, it is highly recommended to complete all courses and seminars before beginning the Master’s thesis.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Compulsory modules</th>
<th>Elective modules</th>
<th>Seminars</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Business Administration</td>
<td>Eco-nomics</td>
<td>Infor-matics</td>
</tr>
<tr>
<td>1</td>
<td>2 x 9 CP</td>
<td>9 CP</td>
<td>9 CP</td>
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<tr>
<td>2</td>
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<td>4</td>
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</tbody>
</table>

Figure 1: KIT requirements

2. The structure of the Master’s Programme in Industrial Engineering and Management (M.Sc.) at LIU

The Master’s programme in Industrial Engineering and Management (M.Sc.) is four semesters long and consists of 120 ECTS CP including a Master’s thesis. The student has to pass the requirements for all compulsory courses in semester one, at least 45 ECTS CP from courses in mathematics or applications of mathematics from the Bachelor level or Master level, at least 30 ECTS CP from courses from the major subject Industrial Engineering and Management and a 30 ECTS CP Master’s thesis in the major subject. The Master’s thesis should be presented and passed as per Linköping Institute of Technology degree regulations.

Figure 2 shows the structure of the subjects and the credits allocated to the subjects. The student chooses a profile and has to take at least 30 ECTS CP advanced courses for the chosen profile of the
field of Industrial Engineering and Management, Operations Research, Engineering Science, etc. The student can start with the Master’s thesis after completing 30 ECTS CP from the elective profile.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Compulsory modules and elective modules</th>
<th>Elective modules</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ind Engineering – introduction courses</td>
<td>Ind Engineering – advanced courses</td>
</tr>
<tr>
<td>1</td>
<td>4*6 CP</td>
<td>6 CP</td>
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<tr>
<td>2</td>
<td></td>
<td>30 CP</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Master’s thesis 30 CP</td>
</tr>
</tbody>
</table>

Figure 2: LIU requirements

3. Double Degree Requirements

The double degree requirements for students that are enrolled at the Master’s Degree program in Business Engineering, KIT, and the Master’s Degree program in Industrial Engineering and Management, LiU.

The individual study curriculum referred to in articles 1 and 2 comprises the following components, depending on which institution the student comes from. Courses and academic activities can be taught at KIT or at LIU according to the following requirements:

3.1 Requirements for students of the Business Engineering program at KIT

i) KIT requirements:
The individual study curriculum for students of the Business Engineering program at KIT comprises:

- The whole curriculum (consisting of 120 ECTS CP according to the KIT requirements of Business Engineering) acquired during a minimum stay of one year at KIT and one year at LIU, with
- academic courses taught at KIT of at least 60 ECTS CP which may include the thesis (30 ECTS CP),
- academic courses taught at LIU of at least 60 ECTS CP which may include the thesis (30 ECTS CP),
- a final Master’s thesis (30 ECTS CP) which is done under the supervision of a faculty member of the host/home institution, in addition to the supervision of a faculty member of the home/host institution,
- 10 modules (1 module = at least 9 ECTS CP) according to the structure of the Master’s program in Business Engineering at KIT. The students have to verify that the courses they follow at KIT and the courses they attend at LIU make up the 10 modules.
- A Master’s degree at KIT requires a 12-week industrial internship that can be completed any time after secondary school.
If a student has completed all the examination components of the KIT curriculum, the Examinations Committee of the Business Engineering program at KIT will determine, at the student’s request, whether the student has passed and with what classification.

i) LIU requirements:
- at least 60 ECTS CP from courses from the curriculum of Master’s degree program in Industrial Engineering and Management at LIU which may include the thesis (30 ECTS CP)
- at least 30 ECTS CP from courses in the major of Industrial Engineering and Management
- at least 45 ECTS CP from courses in mathematics or applications of mathematics from the Bachelor’s level or Master’s level
- a final Master’s thesis (30 ECTS CP) under the supervision of a faculty member of the host/home institution, in addition to the supervision of a faculty member of the home/host institution.

After the fulfillment of the requirements the student receives a Master’s degree in Industrial Engineering and Management from LIU.

3.2 Requirements for students of the Industrial Engineering and Management program at LIU

The individual study curriculum for LIU students at LIU – Industrial Engineering and Management comprises:

i) LIU requirements:
- at least 60 ECTS CP taken from the curriculum of Master’s degree program in Industrial Engineering and Management at LIU which may include the thesis (30 ECTS CP)
- passed the requirements for all compulsory courses
- at least 45 ECTS CP from courses in mathematics or applications of mathematics from the Bachelor’s level or Master’s level
- a final Master’s theses (30 ECTS CP) under the supervision of a faculty member of the host/home institution, in addition to the supervision of a faculty member of the home/host institution.

After the fulfillment of the requirements the student receives a Master’s degree in Industrial Engineering and Management from LIU.

ii) KIT requirements:
- The whole curriculum (consisting of 120 ECTS CP according to the KIT requirements of Business Engineering) acquired during a minimum stay of one year at KIT and one year at LIU, with
- academic courses taught at KIT, of at least 60 ECTS CP which may include the thesis (30 ECTS CP),
• academic courses taught at LIU, of at least 60 ECTS CP which may include the thesis (30 ECTS CP),
• a final Master’s thesis (30 ECTS CP) which is done under the supervision of a faculty member of the host/home institution, in addition to the supervision of a faculty member of the home/host institution,
• 10 modules (1 module = at least 9 ECTS CP) according to the structure of the Master’s program in Business Engineering at KIT. The students have to verify that the courses they follow at KIT and the courses they attend at LIU make up the 10 modules.
• A Master’s degree at KIT requires a 12-week industrial internship that can be completed any time after secondary school.

If the student has completed all examination components of the KIT curriculum, the Examinations Committee of the Business Engineering program at KIT will determine, at the student’s request, whether the student has passed and with which classification. The degree can be only awarded if proof of the required language examination (DSH, TestDaF and equivalent) is presented.

4. Contact details and responsible persons

At KIT:
Auslandsbeauftragte/-er of the Department of Economics and Business Engineering
Tel.: +49 721 608 0

At LIU:
Director of Studies of Industrial Engineering and Logistics
Tel.: +46 13 28 1000