

Consortium Agreement
European Masters Programme in Software Engineering
By and between

Freie Universität Bozen - Libera Università di Bolzano,
P.za Università, 1
I-39100 - Bolzano, Italy
(hereinafter referred to as "UNIBZ")

Technische Universität Kaiserslautern,
Gottlieb-Daimler-Straße 47
67663 Kaiserslautern, Germany
(hereinafter referred to as "UNIKL")

University of Oulu,
Pentti Kaiteran katu 1
FI-90570 Oulu, Finland
(hereinafter referred to as "OY")

Universidad Politécnica de Madrid,
Av. Ramiro de Maeztu, 7
28040 Madrid, Spain
(hereinafter referred to as "UPM")

Collectively referred to as "Full Partner". "Associated Partners" refer to other universities, companies, advisory boards or research centres. The term "Consortium" is used when Full Partners and Associated Partners are referred to as a common entity. The term master candidate and candidate is used interchangeably. "Scholarship holder" refers to a student that has a Consortium or Erasmus Mundus scholarship. "Self-paying student" is any other EMSE student.

This agreement concerns the participation and delivery of the European Masters Programme in Software Engineering (hereinafter referred to as "EMSE"), an integrated joint programme offered by the Full Partners in cooperation with the Associated Partners. The programme offers a common curriculum, common study and examination regulations and a common internship programme.

Within EMSE the Full Partners will offer an integrated study programme according to the constraints set out in the following paragraphs.

§1. Objectives

EMSE is a joint MSc programme offered by the Institutions with the objective of:

- Educating future software engineers to meet the requirements of today international software practice and research;
- Cooperating in students' exchange according to the strategic vision and tactics of the Bologna framework. To this aim, the Institutions will mutually recognize study and exam achievements, the final grades following the agreed study schema and thesis co-supervision and according to the ECTS system;
- Exchanging scholars in order to foster the scientific collaboration, to further develop the curriculum and to share didactic and administrative experience.

§2. Admitting and host institution

UNIBZ is the "admitting Full Partner" to which students apply and enrol to the program. Full Partners at which students are resident are "host Full Partners." Each student resides in at least two host Full Partners.

§3. Coordinating and Partner Institutions

With regard to the Erasmus Mundus framework agreement, as required by the European Commission, UNIBZ shall be referred to as "Co-ordinator". All Full Partners will proactively collaborate to guarantee a successful coordination process.

§4. Governing bodies

The EMSE programme is governed by two cooperating bodies: the Joint Board and the Task Force.

§4.1 Joint Board

The Consortium sets up a Joint Board. The Joint Board consists of one member appointed by each Full Partner and a student member. Every member has one vote. The Joint Board meets at least twice a year out of which one physically at UNIBZ. Any Full Partner can call for an extra meeting. The meetings can be physical or by video conferencing. The quorum consists of the attendance of at least one commission member from each Full Partner.

The Board is ultimately responsible for all tasks implied by this agreement, and aims at running a successful joint degree program. Among these, the following tasks are included:

- Govern the Consortium and its changes;
- Define and change EMSE regulations;
- Determine and manage tuition fees;
- Selection and placement of candidates;
- Define and update the EMSE curriculum;
- Ensure the quality of the program, its further development, and its implementation;
- Report to all participating institutions;
- Manage additional third party funds;
- Administer joint funds raised by the Partners for the purpose of the joint degree program;
- Student advising and complaints management;
- Partner dispute resolutions;
- Invite and select scholars.

The Joint Board is to be consulted if any Full Partner intends to change their part of the EMSE study program; whether due to local regulations, or national law and regulations.

Public decisions will be announced at the official Consortium's website. All Full Partners agree to observe those decisions.

The Joint Board shall work in strict collaboration with the Task Force and commits to explore new

opportunities for the development of EMSE. The Joint Board and the Task Force collaborate for sustaining and developing the programme.

§4.2 Task Force

The Task Force includes a representative of all the Full Partners and Associated Partners (advisory boards, companies, research centres and other universities). Representatives are selected by their interest in the EMSE programme and their experience in the software engineering field at industrial and research level. The Task Force meets at least once per year. The meeting can be physical or virtual and it is independent from the Joint Board meetings.

The Task Force works in strict collaboration with the Joint Board and commits to explore new opportunities for the development of EMSE.

The major activities of the Task Force are

- Fund raising
- EMSE marketing
- Curriculum synchronization with industry, ICT market, and research
- Management of the Internship Programme (Companies inclusion or exclusion, Students evaluation, quality monitoring)

The Task Force advises the Joint Board on new directions for the employability of the EMSE students whereas the Joint Board reports to the Task Force of the actual learning outcome and statistics on students' performance.

The Task Force evaluates the curriculum quality and the students learning outcome in terms of the employability of the students in industry and research.

§4.3 Staff management

UNIBZ will have a project manager and an academic Co-ordinator. Each Institution will have one local administrative Co-ordinator and one academic representative. Local offices will form an administrative network grouped by competence (e.g., group of international relation offices). The project manager will be responsible of coordinating the overall network acting also as reference point for students and scholars of EMSE.

The academic Co-ordinator will be the representative of the Joint Board for the Erasmus Mundus offices and in any other occasion in which EMSE programme needs to be represented by one person.

Each Full Partner shall, at its own expenses, compensate their own resources employed for the programme and assume no responsibility for the compensation of the other Full Partners' resources.

§4.4 Internal procedures related to submission of operational/financial documents

The EMSE project manager at UNIBZ will be responsible of collecting and formulating the required operational/financial reports. All the other Full Partners will support the project manager to collect the required information.

The Joint Board shall confirm the mandatory reports before their submission to the requesting agencies.

§5. Joint promotion/awareness-raising activities

§5.1 Full Partner Specific Activities

Each Full Partner has a press office / marketing office that advertise the programme through the regular channels like national and international fairs.

§5.2 Consortium Website

The Co-ordinator will be responsible on up-dating the official EMSE website (<http://emse.inf.unibz.it>.) with the support by the Full Partners. The website lists, among other things, general information, student mobility and study plans, lectures and teaching material,

information about scholarships, admission criteria, deadlines, instructions for applicants, Universities' profiles and research. The EMSE website also collects information and links on alternative grants provided to students and scholars by other sources.

§5.3 Joint and Full Partner Specific Activities

The Task Force will promote and coordinate the joint/Partner specific activities such as:

- Advertise the programme through EMSE alumnis.
- To reach and attract the self-paying students: 1) Advertising at neighbouring universities. Full Partners distribute posters, flyers and when possible organize informative sessions for prospective students; 2) exploit contacts at other EU universities, using essentially the same strategy (posters and flyers); 3) once Full Partners contact a prospective student, keep in touch with him / her by email / phone or in person when possible; 4) EMSE graduates have been invited to talk at students events - open day, opening of the academic year, and degree ceremony. This would raise the attention on EMSE of local undergraduate students; 5) personal contacts.
- Use of Wikipedia and Facebook page.
- Jointly planned promotion/awareness-raising visits to universities.

§6. Structure of the Joint programme

EMSE is a two-years programme and 120 ECTS. Every year, students gain 60 ECTS at one Full Partners according to their mobility schema (see §6.1). Every year, in addition, students need to take one local language or culture course. Every year, a tutor provides support and guidance to students for the academic programme (see §6.1).

The joint curriculum is build on knowledge areas (a.k.a., moduli): Foundations (Verification and Validation, Empirical Software Engineering Research, Software Process and Project Management, Requirement and Design of Software Systems), Advanced Topics in Software Engineering, Transversal Skills; Free Choice. A learning path includes all moduli, an internship, and a master thesis (**Error! Reference source not found.**, see §6.1). Learning paths specifies the ECTS per each learning activity according with the corresponding mobility schema. The learning paths are publicly available at the EMSE website. Additionally, every year, students participate in a language or culture course of the country in which they reside.

Foundations are taught during the first year in each learning path. Advanced Topics in Software Engineering and Transversal Skills are taught during the first three semesters. All students must complete an internship by their third semester. The thesis work is performed in the fourth semester.

1 st Year		2 nd Year	
1 st semester	2 nd semester	3 rd semester	4 th semester
Foundations		Internship	Thesis
Verification and Validation (EMSE -VV)	8-12 ECTS	8-14 ECTS	30 ECTS
Empirical Software Engineering Research (EMSE - ESER)	8-10 ECTS		
Software Process and Project Management (EMSE - SPPM)	8-16 ECTS		
Requirements and Design of Software Systems (EMSE - RDSS)	8-14 ECTS		
Advanced Topics in Software Engineering		8-18 ECTS	
Transversal Skills		12-16 ECTS	
Free Choice		12 ECTS	
Local language/culture course at partner 1 st Year		Local language/culture Course at partner 2 nd year	
Summer School in ESE			

Figure 1: The EMSE curriculum.

At the end of the first year, students attend a Summer School in Software Engineering offered by

the Consortium. For the first-year students, no fee is charged for the school. Optionally, students can also be selected to attend the school a second time at the end of their second year. Upon request of the student, the Joint Board decides whether the student can attend the school a second time.

Full Partners accept study credits and study achievements of students on the basis of the grades obtained in each of learning activities foreseen by the academic programme. In documented cases, and according with the learning goal of the programme, the Joint Board can accept study achievements not foreseen in the study programme (see §6.1).

§6.1 Mobility schema

The mobility schema foresees one year (60 ECTS) in each of two Full Partners of the Consortium. The host Full Partner of the first year ("First University") is responsible to welcome the new students and provide all the services needed for the students' entrance in Europe and for the local admission procedure. The First University will also transmit the students' transcript of records and control of fulfilment of the EMSE mobility rule.

The host Full Partner of the second year from now on called "Second University" is responsible to welcome and provide all the services for the local admission procedures. The Second University will also support students in the procedure of thesis submission and defence (see §11).

Learning paths for every pair of Full Partners are available for each possible mobility schema, (i.e., for Full Partner A and Full Partner B, the Consortium offers the learning paths (A,B) and (B,A)). In addition, students may visit one of the Associated Partners for their internship or thesis work. Students are jointly monitored by two tutors, one from each of their hosting Full Partners.

§6.1.1 Mobility rule

At the end of the first year and no later than October of the second academic year, students must have gained at least 52 ECTS out of the 60 ECTS required by the academic programme. Students that did not gain 52 ECTS credits exit the EMSE programme and can finish their master studies in the local master programme of the First University.

All students have to attend the annual summer school on software engineering at the end of their first year (see §6). The Joint Board will decide to expel those students who do not attend the school. Such students exit the EMSE programme and can finish their master studies in the local master programme of the First University.

§6.2 Student performance monitoring and evaluation

EMSE has been designed around the Bologna framework and in accordance with the national laws of the Partners. As such the EMSE supports the ECTS system (e.g. by specifying ECTS credits in the joint curriculum and for each course of the learning paths) and uses the diploma supplement for the programme. All Partner institutions use the ECTS system.

Students follow the local mechanism for performance assessment. The career of a student is automatically recognized at consortium level provided it follows the assigned learning path. Deviations from a learning path can be accepted if they conform to the joint EMSE curriculum and the mentors of the two universities agree. The mobility rule (see 6.1.) regulates the exchange of the students between two universities. At each university, students are assigned a mentor that guides them through study choices (including the optional period in the Associated Partners), recognition of exams, and final defence at the Second University.

§6.3 Grading Schema

An equivalent grading schema among the Full Partners' grading systems has been defined and will be maintained based on three-year statistics. The equivalent grading schema defines conversion of grades in the first university to the grades in the second university. Thanks to the equivalent grading schema (courses and final grade) and the learning paths, exams passed at one consortium Full Partner are fully and automatically recognized by the other Full Partners in the consortium.

§6.4 Examination of Students and Organisation of the Thesis Work

All the Full Partners have adhered to the art. 21 of the European Charter¹ that guarantees equal treatment among students also at the examination stages.

The MSc thesis is done in co-supervision by the host universities, including optional external supervision of the Associated Partner visited by the student. The final grade is given in the Second University system and then converted into the First University system. In case of multiple conversion output, the commission choose the most favourable result for the student upon commission majority consensus.

§6.5 Common services to students

§6.5.1 Interaction with non-educational actors and integration of students

The programme includes a mandatory internship and summer school. Both events are organized to expose students to the practice and the professional environment and to research and academic environment. Companies hosting internships have been selected through the "Become a partner" campaign so that they ensure a proper experience in the field to the students. The summer school is a joint event of the EMSE consortium that will invite speakers form the major research communities, e.g. International Software Engineering Research Network (ISERN). For instance, all Full Partners are members of ISERN and as such have already well-established channels in the international community in the field. ISERN will also be the place where to discuss and disseminate the outcome of the EMSE programme.

Other activities that aim at integrate students are:

1. Local student associations organise different social activities (parties, trips, sport activities, etc.) aiming at integrating international students.
2. The EMSE Alumni Association will organize an annual meeting of all EMSE students at one of the Full Partners where students can discuss about their experience and collect feedback. Questionnaires for quality assurance (QA) are also distributed and gathered during this event, complementing the QA systems.
3. The graduation ceremony is held at UNIBZ in December. Every EMSE students can participate in the ceremony. The initiative has been appreciated as students participated to the ceremony at their own expenses.
4. The EMSE Alumni social networks (e.g., facebook), where students keep being in contact also after graduation.
5. EMSE students are invited to serve as student volunteers at conferences.

§6.5.2 Services

The EMSE Co-ordinator is the first and primary contact with the students since the application stage.

The project manager at the Co-ordinator prepares and issues admission letters to students as soon as they are admitted and confirm their participation to the EMSE programme.

The project manager coordinates the services to the students with the Full Partners providing their offices with the needed documentation and support. She is also responsible of the organizational, administrative information in the web portal.

After admission to the programme, the International Relation Offices/Admissions Offices contact students with a welcome letter together with local basic guidelines and information (this may include e.g.: local admission letter if the local immigration requires it, guidelines on how to get in touch with the national consulates abroad concerning the study visas and information to help students to organize their trip to the respective countries). Students are also assisted with information about the enrolment procedure, applying for a residence permit, accommodation, and opening tax code and a bank account.

the advisory offices of the Full Partners organise advising services, careers and psychological counselling.

Accommodations are secured for all EMSE students and scholars as soon as they are admitted and

¹ http://www.europarl.europa.eu/charter/pdf/text_en.pdf

confirm their participation to the EMSE programme.

All Full Partner provide services such as canteens, library and computer labs the university buildings are equipped with WLAN, special needs services, sport services, and services of the language learning centers.

Besides the typical services of the language centers for international students, the centers offer to the EMSE students a course of local language free of charge and accredited in the EMSE curriculum.

Faculty secretariats as well as student secretariat concern didactic, IT facilities (e.g. free wireless, student cards), and health insurance.

All administrative contact persons are fluent in English.

Besides the typical services of these offices, EMSE has a common archiving system (web portal private area) for students' transcripts and career documents (including the thesis essay). This allows all Full Partners to access this documents any time. UNIBZ is responsible to collect and maintain this information.

A separate EMSE alumni database is maintained in the EMSE private area by UNIKL. The controlling offices at UNIBZ provide services the management of tuition fees and scholarship of EMSE.

The legal offices periodically give opinions on and check EMSE regulations against the national and local university policies and directives (e.g., joint degree).

Finally the faculty councils check the consistency of the EMSE joint curriculum with the evolution of local constraints, yearly.

§7. Participation to the Programme

§7.1 Information about scholarships

The website <http://emse.inf.unibz.it> contains information about any scholarship offered by the Consortium, including the eligibility of applicants and the application procedure.

§7.2 Prerequisites for Participation

All students intending to study in EMSE programme must apply through the on-line portal of EMSE <http://emse.case.unibz.it/submissions/index.php>. Yearly, the Joint Board decides the deadlines for application (see §4.1).

§7.3 Application

A complete description of the application procedure (highlighting the application deadline) is publicly available at the website <http://emse.case.unibz.it/>.

The application tool is on line at <http://emse.case.unibz.it/submissions/index.php> and it is also reachable from the EMSE official Consortium web site.

The application requires the following data: personal information, short curriculum vitae, entrance qualification (BSc on Software Engineering, Computer Science or equivalent degree), proof of proficiency in English language, other degrees (either on computer science and other disciplines), preferred mobility scheme and issues related to the Erasmus Mundus scholarship or any other scholarship offered by the EMSE Consortium.

Some of the requested data should be supported by the appropriate documents. They are:

- Copy of the applicant's passport
- Copy of Bachelor's degree certificate in original language (BSc on Computer Science or comparable degree) together with translation of Bachelor's degree certificate in English
- Copy of transcript of records of Bachelor's degree in original language, and its translation in English
- Copy of the certificate of proficiency in English language
- Copies of other degrees' certificates (either on computer science or other disciplines) if available

Due to restrictions placed by the Full Partner's regulations, the following items will also be

requested:

- The BSc on Computer Science degree certificate (entrance qualification) should be legalised by The Hague Apostille Stamp or by the Notary Public to verify its authenticity.
- The transcript of records must include the following information: full titles of subject that the student has completed for the degree, completion times of study units (or at the very least the overall study time at the institution), grades obtained, credits awarded, and information on the grading scale used at the institution.

§7.4 Eligibility criteria for admission

Students are accepted in the program regardless of sex, age, or nationality.

The eligibility criteria to participate to EMSE are:

- Respect the application deadline.
- Provide proof of proficiency in English language: The EMSE requests TOEFL (>580 (with a minimum of 4.5 in the *Test of Written English, TWE*)), IELTS (>6.5 (with a minimum of 5.5 per each section) **Academic Module only!**) or equivalent certificates. Students of the Full partners that graduate from a BSc that certifies at least the B2 European Level are accepted as proof of language proficiency, too. In exceptional cases, the consortium will conditionally accept a personal interview (face to face or videoconference) to assess the level of proficiency instead of the certificate. Applicants accepted using this procedure should obtain the TOEFL or equivalent certificate while enrolled in the master.
- Have been awarded a BSc on Software Engineering, Computer Science, Computer Engineering, or comparable degrees. Special cases of applicants with different but related Bachelor degrees need to explicitly state in the application and contact the consortium. Degrees should have been legalized by means of the Hague Apostille Stamp or by the Notary Public.
- Provide certificate of the subjects taken during their degrees, along with the marks obtained and the number of hours/credits devoted to each subject (i.e., Transcript of Records).

§7.5 Application deadlines

There are two application periods. The first is September 1st to December 31st (year n-1), and the second is May^{1st} to June 30th (year n) if not otherwise announced. The first period is the main application period where all eligible EU and non-EU students can apply. Specifically, it is meant for applicants for Erasmus Mundus Scholarships, or applicants that need to undergo a visa process. The second application period is meant for EU and non-EU applicants with at least 12 consecutive months in EU. No EMSE scholarships will be offered for applicants in the second period. Each of the Full Partners will decide their participation to the second application period.

§7.6 Submission procedure

The submission procedure is completely described in the official Consortium web site.

Applicants apply on-line by the deadline (first and second deadline). Applicants should fill out the application form and enclose the required documents. Required documents will be accepted after the deadline, provided that all administrative decisions will be conditional until complete documentation is submitted. All enclosed documents will be accepted in digital (scanned) form. English will be the language used in all administrative procedures.

§7.7 Receipt of applications

Interested people can contact any Full Partner university to get information about the EMSE programme. Applicants also get information in the website <http://emse.case.unibz.it/> and write an email to the emse-secretariat@unibz.it.

Applicants fill and submit the on-line application form uploading all the needed documents in the web portal <http://emse.case.unibz.it/submissions/index.php>.

The Co-ordinator receives all the application forms and checks the formal criteria for admission. All Institutions have access to the form and the uploaded documents through the web portal.

Any administrative decision taken on the basis of the information provided by the applicant in the application form, but without a supporting document, will be conditionally accepted upon the

presentation of the corresponding documentation. Such documentation will be requested in the acceptance letter, along with a deadline to provide it. Deadlines will be stated on a case-by-case basis.

§7.8 Check of respect of formal criteria for all applications

The on-line portal automatically warns applicants of missing documents. In addition, before the admission deadline, the Co-ordinator checks whether all appropriate documents have been attached to the application form.

The Co-ordinator checks whether the absence of some documents is justified. If not justified, the Co-ordinator contacts applicants to request them.

The project co-ordinator will check whether applicants have provided a copy of the passport, as a proof of nationality.

In case of Erasmus Mundus award, the project manager will check the applications, to ensure that applicants have signed that they comply the requirements of Erasmus Mundus framework.

§8. Selection

The selection will be performed by applying the Code of Conduct for the Recruitment of Researchers.²

§8.1 Timing:

By the first submission deadline:

- Formal admission criteria check will be finished within 7 days. Nevertheless, all received applications will be checked as they are received, to ensure completeness and ask applicants for missing information.
- Selection of applicants will be performed within next 15 days.

By the second deadline

- Formal admission criteria check will be finished within 7 days. Nevertheless, all received applications will be checked as they are received, to ensure completeness and ask applicants for missing information.
- Selection of applicants will be performed within next 15 days.
- Selection of applicants will be performed no later than July 31st.

§8.2 Qualitative selection criteria

Applicants will be scored according to:

- Language skills: They will be qualified as either acceptable or non-acceptable.
- Type of entrance qualification: They will be ranked for relation with the Software Engineering discipline
- Study results: They are calculated as a weighted average of the marks obtained on every degree subject
- Work experience and professional qualifications: Only experience in software-related tasks (including education) will be considered.
- Motivation and willingness: Candidates will be ranked according to their interest in undertaking studies in the software engineering field, and according to their interest in the EMSE programme in particular.

Each criterion is assigned a weight so that the minimum score is 0 and the maximum 100 points. Weights and voting scale are defined in the admission and selection EMSE regulation.

In addition to those weights, the study results are further weighted using the ranking of the university where the student got his degree as parameter. The use of the university ranking is intended to correct the distortion in the selection procedure caused by the high qualifications that typically have students coming from non-demanding, low-quality universities. Those students have better scores than students from high-ranking universities where courses are harder to pass.

² <http://ec.europa.eu/euraxess/index.cfm/rights/codeOfConduct>

Without this second weighting, those students would have more chances to being admitted or even to be proposed for a scholarship.

§8.3 Selection procedure

The project manager will make available to the Full Partners the submitted applications along with the related documentation. For each applicant, assessments will be performed by the project manager and revised by members of the Joint Board. In case it is needed the Joint Board appoints a Selection Committee to perform the selection evaluation. The Selection Committee must include an academic representative of all the Institutions. Divergence is managed by consensus between involved parties. To finish the assessment process, every member of the Joint Board should formally approve the assessments.

The Joint Board will promote equal opportunity in the spirit of the European Charter for Researchers.

For each learning path an equal number of places are assigned. Yearly, the Joint Board decides the total number of places. The Joint Board will check and formally approve the ranked list. Once approved, available places will be filled sequentially using the ranked list.

§9. Enrolment procedure

Admitted students register to EMSE directly at UNIBZ at the deadlines yearly decided by the joint board. There are two registration deadlines corresponding with the two application sessions.

Once registered UNIBZ provides students with official letter of acceptance to be used for the visa and local enrolment procedures.

UNIBZ transmits the list of registered students and their learning paths to the corresponding First University well in time to proceed with the local admittance procedure.

At registration deadlines, UNIBZ also collects the first instalment of the EMSE tuition fee (see §13).

Each Full Partner is responsible to follow students with the enrolment in its local information system and ensure that students provide the necessary documents for the enrolment in the local system and collect the student agreement signed by the student and the local representative. The agreements are sent to the Co-ordinator for archiving.

Each Full Partner will also render assistance to the incoming students for visa application, finding appropriate accommodation and legalising their residence status in the corresponding country.

§10. Principle of participation for Self-Paying Students

Students participating in the programme under the term of this agreement will be subject to the following principles:

- Students will be responsible for covering all costs such as travel costs, living costs during the stay (including accommodation, books, equipment, and consumables). EMSE tuition fee includes any participation cost foreseen by programme (e.g. health insurance, study fees).
- Students participating under this agreement shall be subject to the rules and regulations of the Consortium during the entire duration of their stay. Those rules are specified in the official Consortium website. All students have the same rights and duties regardless of where they study.

§11. Conferral of the Degree

All students of EMSE study one year at each of two universities of the Consortium following the learning path and its mobility schema chosen in their application (see §6 and §6.1).

Full Partners shall recognize automatically the credits gained by students at other Full Partners according to their learning path.

Students may perform their thesis work or Internship at any of the Programme countries or Partner countries. In case the students perform these activities at the Partner member they have to submit their request to the Joint Board no later than three months before the commencement of the Internship or thesis. The initiation, development, and submission of the thesis must follow the EMSE master thesis regulation.

The master thesis is submitted and defended at the Second Full Partner. The thesis is co-

supervised by two teachers of universities that hosted the student and eventually in addition co-supervised by a representative of the Associated Partner at which the student has further performed the thesis work. All supervisors are invited as members of the defence commission. Students having successfully passed all requirements of the joint programme will be awarded a double degree from the two Full Partners of the Consortium.

A joint degree will be issued as soon as all Full Partners have defined their internal procedures. In this case, the thesis will be defended in front of a joint jury.

In any case, the degree will correspond to the Italian "Laurea Magistrale in Informatica", the German degree "Master of Science", the Finnish "Filosofian maisteri, pääaine tietojenkäsittelytiede", and the Spanish "Máster Universitario en Ingeniería del Software – European Master on Software Engineering."

The EMSE joint Diploma Supplement (DS) will contain the following information: student's identification, qualification details, level of qualification, content and results obtained, program details (including the conversion grading schema), access to further studies of profession, the full details of the education system of the two Full Partner universities visited by the student. In particular, the Diploma Supplement contains the joint EMSE curriculum instantiated in the specific learning path.

The grades of the local courses are first converted in the educational systems of the two universities according to the local statistics. Then the ones pertaining to a knowledge element are averaged (weighted average over the credits and grades) in both systems. The most favourable conversion between the grades of the two systems is then taken and assigned to the knowledge element. The DS reports the conversion in the two systems of the grades of the knowledge elements. The consortium keeps a dossier for each student for consortium regulation enforcement and reporting purposes. In case of joint diploma, the second host university issues the certificate; the DS is issued by UNIBZ.

§12. Exchange of Scholars

The Full Partners intend to foster the exchange of lecturers and researchers aiming at cross-fertilization in teaching through research. Scholars are selected by their expertise in the field of Software Engineering or in disciplines that have direct impact on the research and didactics in Software Engineering.

Scholars must stay between a min of two and a max of eight weeks if not otherwise decided by the Joint Board. Scholars must bring concrete added value to the delivery of EMSE programme (teaching, research, promotion activities...). Each Programme or Partner country scholar must come from different higher education institutions. Scholars must sign a contract and a report to the Co-ordinator within three weeks after the end of the stay. The payment of monthly instalments will start after receipt of a copy of the tickets and the signed contract but at the earliest one week before the beginning of the stay.

Selection rules:

- In case of Erasmus Mundus award, scholarship are provided according to the Erasmus Mundus framework
- Institutions must send their proposals related to scholar's invitations to UNIBZ by May every year and at least three months in advance of the commencement of the visit.

§13. Students' Participation Costs and Tuition Fees

There is a common fee for studying in the EMSE programme. Yearly, the Joint Board decides the exact amount. The Co-ordinator collects the common fee.

For the first year students: a portion of the total amount ("First Instalment") is collected when students register to the programme (see §9). The reminder ("Second Instalment") is collected at the beginning of the EMSE academic year. Yearly, the Joint Board decides the amount of the two portions.

For the second year student: the Co-ordinator collects the whole tuition fee (First plus Second Instalment) at the beginning of the academic year.

The fee includes any local costs that students must afford to participate in the programme (e.g.

study fees, health insurance). The fee also comprises additional costs arising from the management of students in the EMSE programme such as scholarship management, financial management, dedicated insurance procedure management, management of students' records and study within the Consortium, internship placements, EMSE advertisement and marketing etc.

One month after the beginning of the academic year, the Co-ordinator distributes the Second Instalment of the first and second year students to the Full Partners. In case it is needed and upon decision of the Joint Board, the Co-ordinator can compensate for eventual reimbursement of eligible costs (e.g., students have erroneously paid the tuition fee at the hosting university). The Co-ordinator keeps the First Instalment of all the students. This amount will constitute a financial reserve used to cover unbudgeted costs of the Co-ordinator (cost for the project manager, insurance unexpected costs, etc.). In the annual meeting, the Co-ordinator reports the financial balance to the Joint Board.

Eventually, remaining money at each Full Partner will be used for EMSE related activities and support.

§14. Budget, development, and sustainability plan

In the annual meeting, the Joint Board establishes the budget for the next edition by allocating funds for scholarship, mobilizing private funds and revising the participation costs if needed. In its annual meeting, the Task Force revises the strategy of fund rising, new members of the "Become a Partner" campaign, and the Internship Program. The Task Force report is periodically reported to the Joint Board.

In case of Erasmus Mundus award, the lump sum of the participation year (2015-2016) is retained by the Co-ordinator and used to partially cover the cost of a project manager (13,000 Euro) and to cover Consortium expenses for Joint Board and Task Force meetings, advertisements and events to announce the programme (7000 Euro). The lump sum per edition (50000 euro) of the three following editions is retained by the Co-ordinator to cover the cost of a project manager (about 35,000 Euro) and the costs of scholars (at least 4 per edition for at least 8 weeks in total per edition, about 10000 Euro) as described in the following table.

	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	Total
Lump sum	20,000	50000		50000		170,000
Project manager	13,000	35000	5000+30000	10000+25000	15000	133,000
Scholars		10000		10000	10000	30,000
Travel and events	7000					7,000

The funds allocated to scholars are retained by the Co-ordinator, but assigned to the Full Partners in equal parts (about 2500 Euro each Full Partner per edition) except the Joint Board decides to distribute them otherwise.

Every year, the Joint Board defines the amount and the procedure to reimburse travel and participation expenses of students for the Summer School in Empirical Software Engineering.

In the yearly meetings, the Joint Board also reviews the development and sustainability plan for the next three editions.

§14.1 Mobility under the Erasmus Charter For Higher Education (ECHE)

The Full Partners have additionally signed mobility, bilateral agreements under the ECHE charter. The agreement allows to support students with no other mobility scholarships and to further attract good students.

§14.2 Development and sustainability

The Joint Board will promote the financial development and sustainability of EMSE by the following activities:

- As mid-term strategy, UNIBZ retains the 10% of all EMSE students' tuition fee for co-financing the programme administration. As long-term strategy, UNIBZ is undertaking a process of national accreditation of EMSE as international programme. Among the other

benefits, the accreditation will also provide some resources from the central administration of UNIBZ for administrative support.

- To complement the visibility induced by the Erasmus Mundus Brand Name, the EMSE Full Partners, as mid-term strategy, are creating a list of universities in the consortium countries where no master course in computer science is offered to contact them for the marketing of the EMSE programme. The consortium also maintains a list of websites where to advertise the programme and a database of students that inquired the EMSE consortium about the programme to contact when the application sessions are open.

Each Full Partner will contribute to the economic sustainability of the project in equal way. The EMSE consortium has agreed the following internal measures of sustainability

- The EMSE consortium aims at offering every year at least two two-year scholarships that include the tuition fee and a monthly allowance to live in any of the consortium countries.
- Left over of the tuition fee (deduced the 10% of the reserve and 5% for travelling costs) is used for financing EMSE related activities with priorities to scholarships for next intakes
- The Task Force must include different types of organizations that can represent the market in which future graduates will find the first job and promote the EMSE programme
- Negotiate with Associated Partners one or two grants for edition
- 10% of the tuition fees of the whole consortium is reserved to contribute to the UNIBZ coordination costs
- Explore new source of funding like scholarship programmes in the partner countries
- Apply to other students and scholars' mobility programmes of the European Commission

§14.3 Scholarship management

UNIBZ will manage the scholarship and the communication with scholarship holders and the funding agency on behalf of the EMSE consortium.

The scholarship payment will start as soon as the grant will be transferred to UNIBZ. Specifically: Contribution to travel and subsistence expenses will be transferred to the student in several instalments according to the needs of the student. The student will be asked to produce the documentation that justifies her expenses. At the end of the two years the remainder of whole due amount will be transferred to the student.

The contribution to participation costs is directly deduced from the scholarship.

The monthly allowance will be paid at the end of any month starting from the month of arrival of the student in instalments. For any payment the student must inform UNIBZ of the details of a bank account opened in her name in the European country where she is taking the course.

The payments shall be made in compliance with the usual practice of the UNIBZ controlling office. If, for any reason, a payment cannot be made, the respective arrears are due in the following payment. In year 2, the payments shall be drawn in monthly payments under the same conditions as specified before. Money transfer costs will be charged to the student. Payments will be immediately stopped in case of any interruption of the course of study.

In its yearly meetings, the Joint Board will decide how to manage and administrate non-Erasmus Mundus scholarships or other types of student' monetary support.

The scholarship payment will be stopped for those students that

1. Did not attain the mobility rule (§.6.1.1).
2. Lack of active participation in the programme (e.g., she does not attend the local language course or the summer school, meetings, Internship interview, or Internship) due to personal reason that are not justified by medical certificates or not justified by the Joint Board.
3. Exclusion form the programme due to serious infringements of the ethical code.
4. Drop out of the programme. The student must indicate by writing his or hers drop-out.

The students have to reimburse the portion of the amount they received and that exceeds the actual expenditures, based on the number of months they attended as well as a copy of the return ticket.

§15. Financial obligations

Any financial undertakings that will arise during the performance of the present agreement must be specified, negotiated, and regulated by the Consortium on a case-to-case basis. This does not include guarantees for any financial contribution from any of the Full Partners, but guarantees their proactive participation in the implementation and performance of the joint program.

§16. Entry into force and duration

This agreement will come into force from the academic year after the date of the signature of the parties and will be valid for the entire duration of the Erasmus Mundus charter. The first intake (students and scholars) will start in the academic year 2016-2017.

It shall be renewable and modifiable by mutual agreement of the Full Partner institutions. All changes and modifications shall be done in writing and shall be signed by the authorised representatives of each Full Partner.

Any party may withdraw from this agreement for any forthcoming edition of the EMSE by providing written communication to other Full Partners at least 6 months before the forthcoming edition is launched.

For any edition already launched, or started, all Full Partners are committed to continue with that master edition until its conclusion, if not otherwise agreed among all Full Partners.

§17. Applicable law and Competent Court

The settlement of any difference or conflict arising from or in connection with this agreement shall be attempted by an amicable effort from the Full Partners.

The EMSE follows national legislation in each country.

Date:

Signatures and stamps:

Bozen-Bolzano,

Prof. Walter A. Lorenz
Rector
Freie Universität Bozen - Libera Università di Bolzano

Kaiserslautern,

Univ.-Prof. Dr. rer nat. Helmut J. Schmidt
Präsident
Technische Universität Kaiserslautern

Madrid,

Prof. Carlos Conde Lázaro
Rector
Universidad Politécnica de Madrid

Oulu,

Prof. Jouko Niinimäki
Rector
University of Oulu