

FSB

100

100 godina Fakulteta
strojarstva i brodogradnje
Sveučilišta u Zagrebu

100 Years of Faculty of
Mechanical Engineering
and Naval Architecture
University of Zagreb



Erasmus+ godišnja konferencija za područje visokog obrazovanja
8. – 10. prosinca 2021.



ERASMUS MUNDUS združeni diplomski studij, iskustva korisnika



Predavač: Prof. dr. sc. Jerolim Andrić, Sveučilište u Zagrebu, Fakultet strojarstva i brodogradnje



- 1. OSNOVNE INFORMACIJE O PROJEKTU**
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1. OSNOVNE INFORMACIJE O PROJEKTU

ERASMUS MUNDUS JOINT MASTER DEGREE "SUSTAINABLE SHIP AND SHIPPING -SEAS 4.0".

- Dodatni *master* studij u trajanju od tri semestra namijenjen završenim studentima (minimalno Bsc) različitih tehničkih studija (prvenstveno brodogradnje, strojarstva, zrakoplovstva, elektrotehnike, itd.) iz cijelog svijeta koji žele postići **dodatne kompetencije u području brodogradnje i pomorskih tehnologija osvježene s novinama iz 4.0 Industrije.**
- Ciljevi SEAS 4.0 programa su **osposobiti buduće inženjere s novim znanjima i povećati njihovu konkurentnost u zapošljavanju u multidisciplinarnoj i globalnoj domeni projektiranja, izgradnje i upravljanja složenim brodovima.**
- Konkretno, **SEAS 4.0 nastoji proširiti standardna inženjerska znanja s znanjima iz područja zelene i održive ekonomije, digitalizacije, simulacija, automatizacije** za koja se pojavljuju potrebe u području brodogradnje i pomorskog prometa.



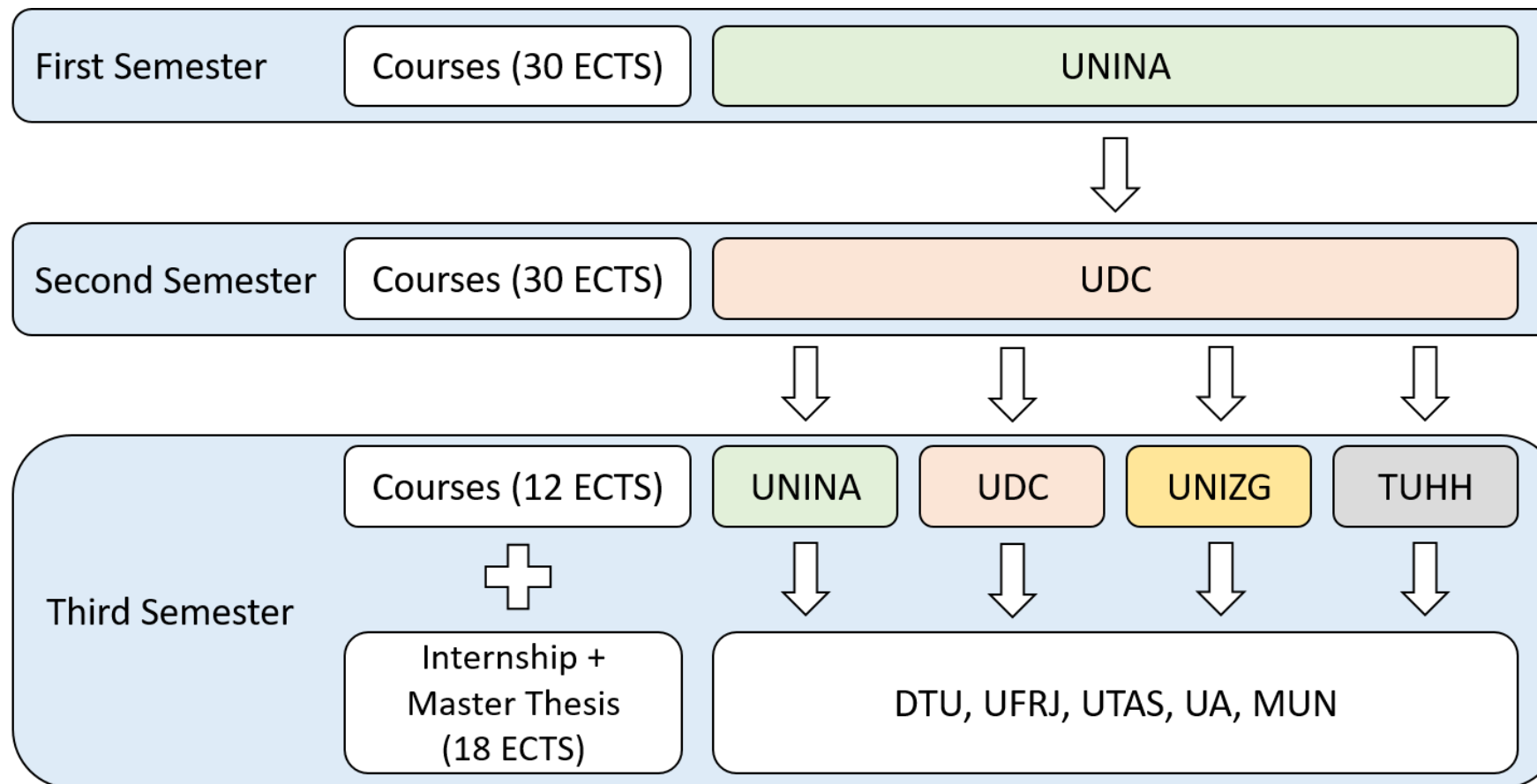
1. OSNOVNE INFORMACIJE O PROJEKTU

- Glavni partneri uz **Sveučilište u Zagrebu Fakultet strojarstva i brodogradnje (UNIZG)**:
 - **Sveučilište u Napulju, Italija, koordinator projekta (UNINA)**;
 - **Sveučilište A Coruña, Španjolska (UDC)**;
 - **Tehničko sveučilište u Hamburgu, Njemačka (TUHH)**.
- **Predviđeno je školovanje 4 uzastopne generacije studenata od kojih svaka ima 22 studenata** koji za svoje školovanje primaju stipendiju koja im pokriva sve troškove (školarina, troškovi putovanja, troškove stanovanja i života, itd.).
- Projekt odobren u srpnju 2020. god.
- Pripremna godina od 09/2020. do 09/2021.
- Prva generacija startala u ak.god. 2021/2022.
- Sve informacije: <http://www.master-seas40.unina.it/>



1. OSNOVNE INFORMACIJE O PROJEKTU

- Prvi semestar se provodi u Napulju (UNINA), drugi u A Coruña (UDC), a treći po izboru studenata u jednoj od četiri navedene institucije.





1. OSNOVNE INFORMACIJE O PROJEKTU


100 godina Fakulteta strojarstva i brodogradnje Sveučilišta u Zagrebu
100 Years of Faculty of Mechanical Engineering and Naval Architecture University of Zagreb





Associated Partners

















Industrial Partners

Classification societies






Research and Development




Shipyards & Shipowners & Equipment Producers


























Association of Naval Architects – Cluster of Maritime Industry








1. OSNOVNE INFORMACIJE O PROJEKTU

IZDAVANJE DIPLOMA

- **Double degree**, issued independently by the University of Naples Federico II and the University of A Coruña **with an explicit reference to the third semester mobility**:
 - *Sustainable Ship and Shipping 4.0 Erasmus Mundus Joint Master Degree (SEAS 4.0) / Master interateneo di II livello Sustainable Ship and Shipping 4.0, issued by the University of Naples Federico II.*
 - Sustainable Ship and Shipping 4.0 Erasmus Mundus Joint Master Degree (SEAS 4.0) / Master Universitario Erasmus Mundus en Sostenibilidad e Industria 4.0 aplicada al Sector Marítimo (SEAS 4.0), issued by the University of A Coruña.

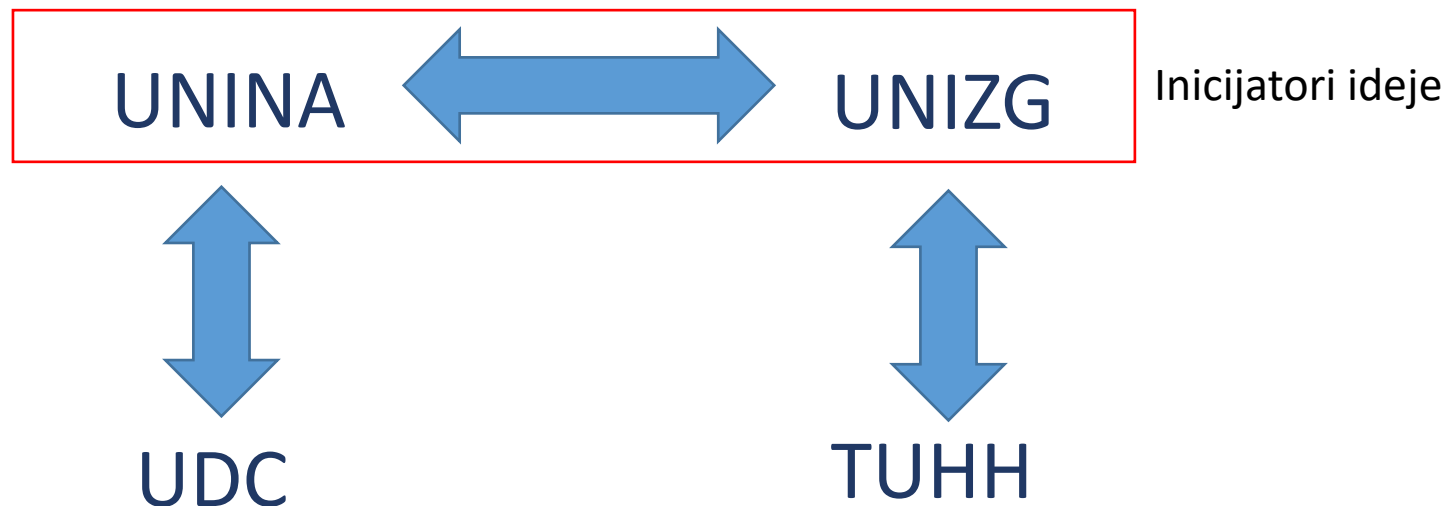
Additionally, a Joint Diploma Supplement written in English and delivered by the Coordinating University (UNINA) will describe:

- the overall organization of the Master programme
- the details of the student's study programme and mobility and
- full transcript of all ECTS points obtained during the master programme




2. PRIPREMA PROJEKTOG PRIJEDLOGA

- **KAKO PRIPREMITI PROJEKTI PRIJEDLOG, OD ČEGA POČETI?**
 - **Imati jasnu ideju projekta/studija.** Provjeriti da li postoji EMJMD sličnog sadržaja. Koje su novine, benfiti koji se studijem nude?
 - **Odabir pouzdanih i provjerenih projektnih partnera (Consortium University)** koji dijele istu viziju i spremni su uložiti značajnu količinu vremena na pripremu projektnog prijedloga sa neizvjesnim ishodom (prolaznost). Već izgrađeni odnosi, prethodna suradnja i komplementarnost među partnerima su dobra osnova.




- KAKO PRIPREMITI PROJEKTI PRIJEDLOG, OD ČEGA POČETI?
- **Koristiti dostupne materijale EU**



ERASMUS+
Key Action 1
Erasmus Mundus
Joint Master Degrees
EMJMD
Call for proposals 2019

**How to prepare a
competitive EMJMD
proposal**

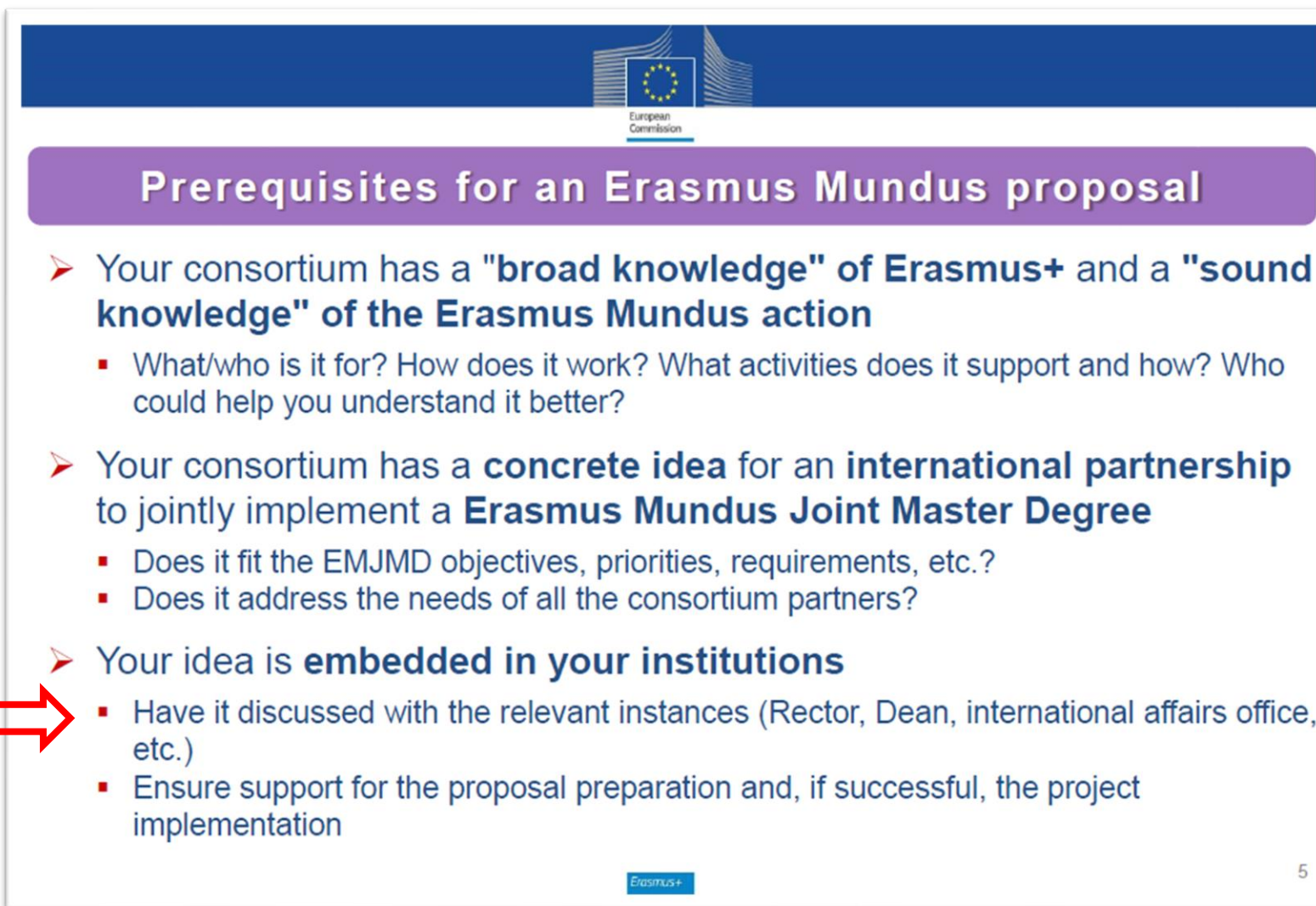




2. PRIPREMA PROJEKTOG PRIJEDLOGA

- KAKO PRIPREMITI PROJEKTOG PRIJEDLOG, OD ČEGA POČETI?

➤ Koristiti dostupne materijale EU



The screenshot shows a slide with a blue header bar containing the European Commission logo. Below the header is a purple bar with the title "Prerequisites for an Erasmus Mundus proposal". The main content area is white and contains three bullet points, each with a red arrow icon. The third bullet point is highlighted with a red arrow pointing from the left side of the slide. At the bottom of the slide, there is a small blue box with the text "Erasmus+" and the number "5" in the bottom right corner.

Prerequisites for an Erasmus Mundus proposal

- Your consortium has a **"broad knowledge"** of **Erasmus+** and a **"sound knowledge"** of the **Erasmus Mundus action**
 - What/who is it for? How does it work? What activities does it support and how? Who could help you understand it better?
- Your consortium has a **concrete idea** for an **international partnership** to jointly implement a **Erasmus Mundus Joint Master Degree**
 - Does it fit the EMJMD objectives, priorities, requirements, etc.?
 - Does it address the needs of all the consortium partners?
- Your idea is **embedded in your institutions**
 - Have it discussed with the relevant instances (Rector, Dean, international affairs office, etc.)
 - Ensure support for the proposal preparation and, if successful, the project implementation

Erasmus+ 5



2. PRIPREMA PROJEKTOG PRIJEDLOGA

- KAKO PRIPREMITI PROJEKTI PRIJEDLOG, OD ČEGA POČETI?

➤ Koristiti dostupne materijale EU



Building up your EMJMD consortium (1)

- ❖ **Start locally in your institution:**
other colleagues, services, departments with experience in running international mobility projects (in particular Erasmus Mundus)
- ❖ Consult your **Erasmus+ National Agency:**
for advice and networking opportunities
- ❖ Continue searching for **other stakeholders** from Programme Countries to **expand the consortium** by widening it **across the EHEA:**
other HEIs, research institutes, enterprises, local/regional/national authorities, etc.
- ❖ **Enlarge** the consortium with **international partners** from Partner Countries:
organisations you have worked with in the past with specific expertise, colleagues that share the same enthusiasm for international cooperation and mobility projects, etc.
- ✓ *Keep the size of the partnership manageable*

Erasmus+

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2. PRIPREMA PROJEKTOG PRIJEDLOGA

- KAKO PRIPREMITI PROJEKTOG PRIJEDLOG, OD ČEGA POČETI?
 - Koristiti dostupne materijale EU



Drafting the EMJMD proposal


- ✓ **Coherent** in its entirety; avoid contradictions; avoid "patchwork"
- ✓ **Simple & concrete**: use examples, justify your statements, bring proofs
- ✓ **Clear**: follow the questions and answer them in the right order
- ✓ **Explicit**: do not take anything for granted; do not assume experts will always immediately understand; avoid abbreviations or explain them
- ✓ **Rigorous**: the application is the basis on which your project will be implemented; it is also the cornerstone of your partnership commitment
- ✓ **Focused**: stick to what is asked
- ✓ **Complete**: ensure (twice!) you have followed all the instructions and that the proposal fulfils all the mandatory requirements
- ✓ **Easy Read language**: keep most sentences 10-15 words long. Use varied sentence length to make them interesting, but keep sentences simple.

Erasmus+ 8

2. PRIPREMA PROJEKTOG PRIJEDLOGA

- KAKO PRIPREMITI PROJEKTOG PRIJEDLOG, OD ČEGA POČETI?

➤ Koristiti dostupne materijale EU



European Commission

Award criterion 1 Relevance of the project (40 points)


DO's

- **Convincing evidence** for "jointness" and course integration
- **Thoroughly assessed results** of needs analysis at different levels
- **Innovation & excellence** for HEIs, quality & attractiveness widespread across the EHEA
- **Concrete benefits** for each targeted group (students, academic staff, etc.)

➔

DON'Ts


- **Dominance** of coordinating institution instead of a common and integrated approach
- **Imprecise** targets for the degree award and **lack of joint strategy**
- **Inaccurate** needs analysis methodology resulting in **irrelevant conclusions**
- **Weak integration** of internationalisation strategies at the cost of stakeholders


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2. PRIPREMA PROJEKTOG PRIJEDLOGA

- KAKO PRIPREMITI PROJEKTOG PRIJEDLOG, OD ČEGA POČETI?

➤ Koristiti dostupne materijale EU



European Commission

Award criterion 2: Quality of project design and implementation (20 points)


DO's

- **Effective strategy and tools** for monitoring and ensuring excellence
- **Academically relevant design and rationale** of mobility paths with **concrete learning outcomes**
- **Proactive consortium** support responding to students and staff needs
- **Interaction** with world of work **integrated** in the course

➤

DON'Ts

- **Absence of an established mechanism** to appropriately react to evaluation findings
- **Unfeasible, unbalanced and ineffective** mobility schemes
- **Underestimation** of the administrative **workload** to the detriment of the course
- **Negligence of student integration** in socio-cultural and professional context


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2. PRIPREMA PROJEKTOG PRIJEDLOGA

- KAKO PRIPREMITI PROJEKTOG PRIJEDLOG, OD ČEGA POČETI?

➤ Koristiti dostupne materijale EU



European Commission

Award criterion 3: Quality of project team and cooperation arrangements (20 points)

DO's

- **Synergies** resulting from the **complementarity** of partners
- Existing partnerships enriched with **new partners** from **EHEA**
- **Inclusive and transparent** cooperation mechanisms, based as well on **mutual trust**
- **Academic jointness** as **central theme** during course implementation
- **Realistic and transparent** financial plan

➔

DON'Ts

- **Unclear motivation** of partners to join the project
- **Failure** to ensure **institutional backing** of the partners
- **Lack of attention** to the variety of national **legal frameworks**
- Avoid too **rigid cooperation arrangements** not allowing for necessary adaptations
- **Imprecise** financial management provisions of the consortium



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2. PRIPREMA PROJEKTOG PRIJEDLOGA

- KAKO PRIPREMITI PROJEKTOG PRIJEDLOG, OD ČEGA POČETI?

➤ Koristiti dostupne materijale EU



Award criterion 4
Impact and dissemination (20 points)


DO's

- **Concrete indicators and tools** for measuring impact on **EHEA HEIs** and other stakeholders
- **Tailored** promotion /dissemination approach to different audiences
- **Integration of labour-market elements** to promote employability and support sustainability
- Provisions for **wide access** to course materials

➤

DON'Ts

- Lack of definition and promotion of the programme's **distinctive selling points** demonstrating its competitiveness
- No **networking activities** to ensure wide programme **visibility** and **recognition** by academia, students and future employers
- **Sustainability strategy** not adequately considered and not integrated in **all project stages**



- **KAKO PRIPREMITI PROJEKTI PRIJEDLOG, OD ČEGA POČETI?**
 - **Web stranice ili projektne prijave već odobrenih programa.** Tamo se nalazi jako puno detalja i organizacijskih rješenja koji možete implementirati na vaš primjer.
 - <https://www.master-rem.eu/>
 - <http://www.emship.eu/>
 - <https://www.masterala.eu/>
 - Predvidjeti realistično vrijeme za pripremu projekta.
 - Sve administrativne i druge dileme nastojati riješiti prije početka pisanja projektne prijave.
 - Za pisanje samog projektnog prijedloga sigurno predvidjeti barem nekoliko mjeseci.



- Rezultati evaluacije –sredina srpnja.
- Prijava uspjela 😊, Projekt odobren 😊.

Programme	EPPKA1 - KA1 - Key Action 1
Action	JMD-MOB - Joint Master Degrees
Proposal	Call for proposals : EAC/A02/2019 JMD-MOB
Application No	619828-EPP-1-2020-1-IT-EPPKA1-JMD-MOB
Title	Sustainable Ship and Shipping 4.0
Decision	ACCEPTED

Dear Applicant,

You have submitted an application to the Erasmus+ programme, 2020 call for proposals for the action specified above. The call for proposals closed on 13/02/2020 - 17:00 (CET/CEST, Brussels time). The Education, Audiovisual and Culture Executive Agency (EACEA) received 97 eligible applications for this call.

I am writing to inform you about the selection decision taken by the Head of Department of the Agency, acting in her capacity as authorising officer, based on the recommendations of an Evaluation Committee assisted by external experts.

I am pleased to inform you that your application has been selected for EU co-funding.

It received 86/100 points, which is on or above the minimum threshold for funding of 81/100 points given the available budget.



2. PRIPREMA PROJEKTOG PRIJEDLOGA

- Rezultati prijave – evaluacijski obrazac, korisne informacije, pogotovo ako prijava nije odobrena. Slijedeće godine ponoviti prijavu, ispraviti je i poboljšati koristeći napomene navedene u evaluacijskom obrazcu!
- Kao što kod pisanje prijave treba držati gore spomenutih pravila, **ista/slična pravila primjenjuju recenzenti prilikom ocjenjivanja vašeg projektnog prijedloga!**

Annex 1				
619828-EPP-1-2020-1-IT-EPPKA1-JMD-MOB				
	Award Criteria	Comments	Score	Max Score
1	Relevance of the project	<p>The proposal describes the level of jointness and joint approach by the partners of the consortium well. Furthermore, the design has been structured in order to achieve the aims of the proposed master programme. The proposal explains in detail the objectives of the programme that are positively impacted by the joint efforts of the consortium.</p> <p>The proposed master is well integrated within the degree catalogues for the three partners. The master will be delivered as a double degree but with a joint supplement that describes the subjects and the credits that the student has taken. The proposal does not fully explain if the partners will intend to seek a joint degree, or even if it would be possible.</p> <p>The proposal clearly identifies the need for updated education in the fields of digitalisation and sustainability, both of which are offered in the master programme. Several concrete goals are offered in order to achieve this. The financial support from EU is well justified with the main argument being that it is needed to reach sustainability.</p> <p>The proposal is very complete and clear about how the attractiveness of the European higher education area is increased. All the applicants are providing plenty of information and argue successfully that they will foster excellence and innovation in the academic fields of shipping and related subjects targeted by the proposal. Learning outcomes, including soft skills, are convincingly elucidated. Innovative elements and complementarity with respect to existing programmes are credible. The project objectives are coherent with global and EU strategic goals and this impacts positively the expected EHEA competitiveness.</p>	37	40

3. PRIPREMNA GODINA

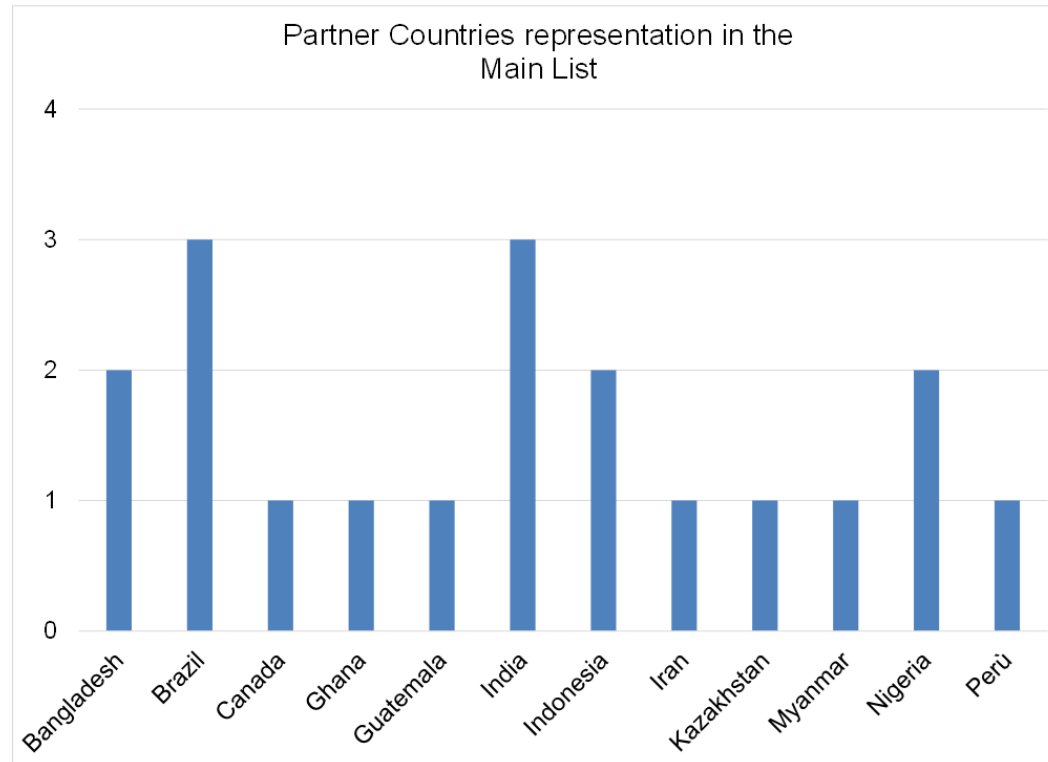
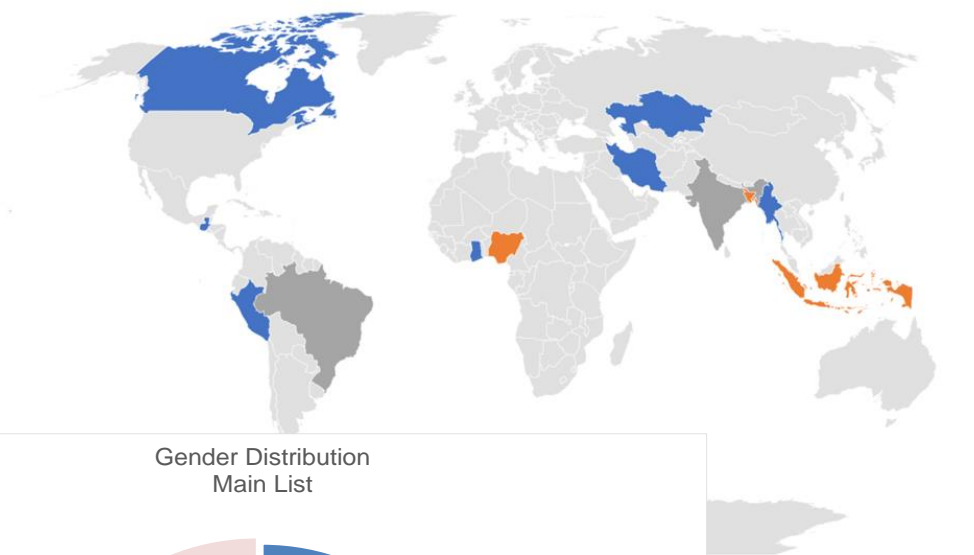
Obavezno predvidjeti **PRIPREMNU GODINU** kako bi se na vrijeme mogle organizirati različite aktivnosti vezane za početak nastave:

1. **Izrada web stranice projekta**
2. **Oglašavanje i reklamiranje studija, privlačenje potencijalnih studenata**
3. **Definirati jasna i nedvosmislena pravila za prijavu na natječaj za izbor studenata koji će dobiti stipendiju.** Koji su preduvjeti u smislu prihvatljivosti? Ako ste dvosmisleni ili nejasni puno je pitanja, e-mail komunikacije, velika potrošnja vremena!!
4. **Proces selekcije kandidata. Kriteriji ocjenjivanja i odabira.** Kako odabrati 22 kandidata od (npr. prijavljenih 100) ako dolaze iz različitih kultura, sustava ocjenjivanja, završili su različite fakultete (brodogradnja, strojarstvo, elektrotehnika, pomorstvo, itd.) itd.?
5. Nakon odabira kandidata **proces potpisivanja ugovora i ishodaenja svih relevantnih dokumenata za dolazak na studij** (Viza, osiguranje, boravišne potvrde, porezni broj, COVID situacija...).
6. Pripremna godina je plaćena, obavezno **predvidjeti, ako ste koordinator, zapošljavanje jedne osobe za administrativno organizacijske poslove, ima ih jako puno!**

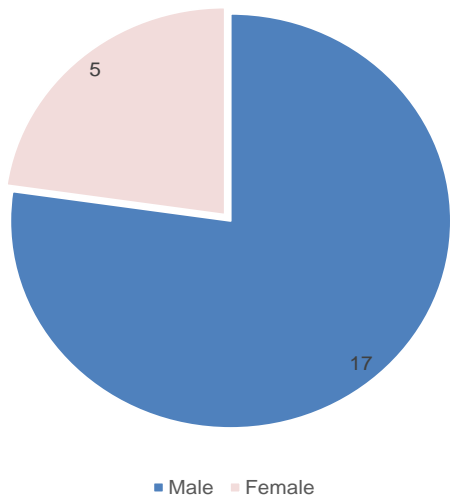
3. PRIPREMNA GODINA

Geografska distribucija 19 odabranih studenata iz partnerskih zemalja + 2 iz Turske i 1 iz Španjolske, ukupno 22.

Partner Countries Main List World



Gender Distribution Main List



Potrebno prije dolaska na 1.semester u Napulj osigurati sve potrebne standardne dokumente (VIZA, dozvola boravka) + COVID kriteriji.



4. PROVOĐENJE PROJEKTA

- Nastava počela 6.rujna 2021. u Napulju, Italija.
- Od inicijalno predviđenih 22 studenata na kraju se upisalo 21.
- Pozitivno iskustvo, multikulturalno okruženje.
- Odrađeni prvi ispiti!





5. ZAKLJUČAK

Sudjelovanje u EMJMD omogućuje:

- Internacionalizaciju i bolju međunarodna prepoznatljivost vlastite ustanove.
- Povećanje međunarodna mobilnosti nastavnika i studenata
- Mogućnost upoznavanja različitih metoda podučavanja kroz iskustva partnerskih Sveučilišta.
- Mogućnost razvoja novih metoda podučavanja, unaprijeđenje postojećih kolegija i razvoj novih kolegija na engleskom jeziku.
- Bolja povezanost svih sudionika u realizaciji studija od partnerskih Sveučilišta, pridruženih partnera i industrijskih partnera te podizanje kvalitete suradnja na novu dimenziju.
- Stjecanje iskustva podučavanja i komunikacije u multikulturalnom okruženju.



Hvala na pažnji!

SEAS 4.0
Co-funded by the
Erasmus+ Programme
of the European Union

SEAS 4.0: CONTACT & INFORMATION.

- www.master-seas40.unina.it
- infomasterseas40@unina.it
- [@SEAS40](https://www.facebook.com/SEAS40)
- [@seas_40](https://www.instagram.com/seas_40)
- [linkedin.com/company/seas40/](https://www.linkedin.com/company/seas40/)

Logos of partner institutions: University of Studies of Naples Federico II, Universidade da Coruña, University of Zagreb, and others.

QR code for more information.

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