

MOTIVATION FORM FOR JEMARO (MANDATORY)

General Instructions (please read carefully)

In order to show your motivation for JEMARO, please fill out this mandatory motivation form.

There are **2 parts** that you must fill out. **Failing to use this mandatory form will lead in obtaining a 0 grade on the motivation criterion.**

Use font size 11 or 12.

PART I – You and your motivations

Instructions:

This part helps us understand who you are as a person and maybe as a future JEMARO student.

You do not need to address anyone with an introductory phrase such as “To whom it may concern” or “Dear...”

Simply answer each question one by one like in a regular form. There is no need to use connecting words between the answers to each question.

1) Personal introduction (300-500 characters, spaces not included).

2) State in short why you want to apply for JEMARO and why you chose a given robotics related research topic to work on during the Research Track (300-500 characters, spaces not included).



- 3) Develop your strongest qualifications, past experiences and qualities that will help you to succeed in JEMARO (500-1000 characters, spaces not included).

- 4) Develop what will be your professional project after getting your master's degree (300-500 characters, spaces not included).

PART II – Your background

Instructions:

This part comes as an additional tool to your transcripts. It is meant to help us understand your academic background and how it relates to JEMARO.

Fill out the tables 1 & 2 following the indications given.

Table 1 – Recall of your studies

| | |
|--|--|
| Undergraduate degree title (if you also obtained a master, mention it too) | |
| Mention minor/major or specialization if any | |

Table 2 – Links between your curriculum and JEMARO

Example on how to fill out the table (the matrix to fill out is on the next 2 pages, in red):

| THEME | Key concept | Not covered | Beginner | Intermediate | Advanced | Most relevant course(s) where the concept was covered (list 3 courses max.) |
|-------------------------|--------------------------|-------------|----------|--------------|----------|---|
| Artificial Intelligence | Knowledge representation | X | | | | N/A |
| | Machine learning | | | | X | ML201 Supervised learning ML302 Deep learning ML405 Advanced Machine learning |
| | Symbolic AI | | X | | | SAI101 Introduction to symbolic AI |

| THEME | Key concept | Not covered | Beginner | Intermediate | Advanced | Most relevant course(s) where the concept was covered (list 3 courses max.) |
|--------------------------------|--|--------------------------|--------------------------|--------------------------|--------------------------|---|
| Artificial Intelligence | Knowledge representation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Machine learning | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Symbolic AI | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Computer Engineering | Digital and embedded systems | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Object-oriented programming | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Operating systems | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Control Engineering | Controllers | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Laplace transform | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Linear systems | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Non-linear systems | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Stability | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Mechanics | Mechanical design methods | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Theory of mechanism and machines (kinematic and dynamic modelling) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

| THEME | Key concept | Not covered | Beginner | Intermediate | Advanced | Most relevant course(s) where the concept was covered (list 3 courses max.) |
|--------------------|------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---|
| Mathematics | 2D/3D geometry | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Differential calculus | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Linear and matrix algebra | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Logics | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Numerical methods | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Programming | C/C++ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | MATLAB | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Python | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Robotics | Industrial robotics | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Manipulators modelling | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Mobile robots | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Robotic control | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Robotic software programming | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |