

Equivalentie- en accreditatiebesluit met positief eindoordeel voor de opleidingen master in de ingenieurswetenschappen en master in de sociale en militaire wetenschappen van de Koninklijke Militaire School

datum	Oordeel van de accreditatieorganisatie
29 februari 2016	De Commission des Titres d'Ingénieur (CTI) heeft vastgesteld dat de opleidingen van de Koninklijke Militaire School (KMS) voldoen aan de generieke kwaliteitswaarborgen.
onderwerp	Equivalentie- en accreditatiebesluit
Equivalentie- en accreditatiebesluit	De accreditatie van de master in de ingenieurswetenschappen geeft de afgestudeerden van deze opleiding tevens het recht om in Frankrijk de titel <i>ingénieur diplômé</i> te voeren. Daarnaast krijgt deze masteropleiding van CTI het label <i>EUR-ACE Master</i> .
masteropleidingen KMS	
Bijlagen	
2	<p>Samenvatting van de beoordeling</p> <p>"The Royal Military Academy (RMA) intends to train officers able to lead men under various, complex and unique circumstances, in a high technological context, with an integrated multidisciplinary curriculum leaving large part dedicated to personality development. Its values are honor, discipline, commitment, courage and respect. The institution gives great importance to the development of initiative and responsibility and expects from students and alumni loyalty, solidarity and integrity.</p> <p>The annual students flow is in a range of 130 - 150 enrolled, including 30 - 40 in the engineering programme.</p> <p>The yearly number of awarded degrees is 25 - 30. The permanent teaching staff is composed of 48 teachers (including 17 professional soldiers) and 61 teaching assistants (including 54 professional soldiers). It is completed by 24 part-time teachers (including 19 professional soldiers). For the training of the officers, 67 % of the teaching hours are lectured by doctorate holders (72 %, taking into account the languages and operational). 6 % of the teaching hours are lectured by external contractors.</p> <p>The buildings cover 85 250 sq.m. including 16 570 sq.m dedicated to teaching. The campus includes individual rooms, a restaurant and numerous and varied sport facilities. Laboratories are properly equipped for their academic mission. The ballistics laboratory, having very few or no civilian equivalent, enables advanced research activities. Laboratories are active. Partnerships are well established. The research-teaching link is strong. Scientific research dissemination is deeply rooted. Excellent center for documentary resource.</p> <p>However, contacts with the Defence department are not sufficiently frequent for the Defence to know enough about RMA and its actions.</p> <p>RMA developed partnerships, most of the time through Erasmus agreements, with the main european military institutions whose cursus are in line with the Bologna process (Netherlands, France, Germany, Romania, Austria, Poland, Sweden, Czech Republic, Turkey). RMA is also involved in european military institutions networks and has coventions with several military institutions outside Europe (Tunisia, Algeria, Congo).</p>

Pagina 2 van 6 RMA signed cooperation agreements (in particular in the doctoral studies field) with most of the Belgian universities. RMA participates in joint trainings in naval construction with ULg and UGent, and in aeronautical and spatial mechanics with VUB and ULB.

Education

RMA's education relies on 4 pillars (academic, military, physical and character). It prepares students for an entire career rather than an initial function.

Educational objectives arise from the missions entrusted to the RMA by the headquarters of Defence and approved by the Defence Minister. The institution trains engineers but its first mission is to train officers. This specificity is clearly stated in the programme's objectives : general objectives are common to all officers and specific objectives are expected for the polytechnical engineering programme.

Those objectives are reached by a high level academic teaching with multidisciplinary academic courses, technological courses and training periods in the fields of sports and character development. Learning by project and experimentation is necessary to develop a sense of concrete and reality. This is done through practical work and projects in the academic field and through military camp periods, both in Belgium and abroad, in the professional field.

The three years of Bachelor focus on fundamental sciences and generic engineering sciences. The third year provides all students the necessary knowledge to make the choice of modules and options for their Master. Students develop a broad field of knowledge in fundamental sciences, which allows them to reach a certain overview and detachment towards the problems an engineer has to solve.

The organization of the curriculum of the engineering programme, thanks to its modules and optional tracks, guarantees a multidisciplinary education, while specialized in one of the four fields opened in RMA : weapons systems and ballistics ; building materials and construction; mechanics ; telecommunications.

Students have to choose three teaching modules two of which are mandatory in terms of the chosen specialty. The third module, freely selected, allows students to acquire knowledge and skills in a field related to the specialty.

The ability to work independently is academically acquired. Moreover, on a practical level, many aspects of daily life in RMA are taken care of by the students upon request from the RMA general command and class commander. The ability to organize their work is stimulated individually by the "StudyBook" that forces them to manage their agenda in time and space, and collectively by the many projects they must perform in groups.

Evaluation is based on exams at the end of each semester and on the final dissertation. RMA's polytechnical faculty, which organizes the programme, is structured in seven departments. At master level, there are no language courses but courses in English. 30 of the 180 ECTS credits are allocated to SHEJS. A module of 18 ECTS credits remains the free choice of the students. A transdisciplinary project of 6 ECTS credits achieves management skills. Leadership is studied during the military periods. The final dissertation allocates 27 ECTS credits.

Corporate culture as such is not particularly developed, given the specific education goals. The Defence components stand in this context for the « corporation ». The military education contributes to the set-up of a certain corporate culture. It is also present in some courses of the master: military sociology (3 ECTS); work sociology (3 ECTS); military leadership (3 ECTS); introduction to economics (2 ECTS).

The pedagogical model is perfectly defined with a learning outcomes approach in accordance with CTI's criteria. The continuous improvement process is perfectly established and shows a global consultation of all the internal and external stakeholders.

In June 2009, the Commission des titres d'ingénieur accredited (admission par l'Etat) the civil polytechnician engineering – Master from Royal Military Academy (Belgium) for 6 years (starting 1st of September 2009). This decision came with the following recommendations:

- improve the first year's success rate,
- clarify the objectives of the programme in terms of learning outcomes
- check the relevancy of the English test regarding the European level B2
- consider the development of industrial internships and international stays
- strengthen the programmes' link with research
- rewrite the diploma supplement in accordance with the European standards
- set up a workable systematic evaluation of courses
- consider the possibility of a direct admission in Master.

A follow-up report about these recommendations was requested after 3 years. Recommendations 2, 3, 6 and 7 were implemented. Follow-up on recommendations 1 and 5 is still ongoing. Regarding recommendation 4 (internship), the institution considers that professional internships are completed (military internships) and that the programme already allows international awareness. Recommendation 8 (master) cannot be considered given the legal framework.

Strengths

- complete bilingual programme based on 4 pillars
- strong students support throughout the whole duration of the programme
- bilingual teachers speaking English as well
- sustained research activities with respect to the number of teachers
- efficient quality system
- high quality sport facilities

Weaknesses

- restrictive legal framework bridling some initiatives
- lack of targeted international strategy
- important number of research topics with respect to the number of teachers
- weak communication on the institutions' expertise
- weak number of students in some optional fields
- lack of visibility regarding alumnis career evolution
- some support functions do not live up to the departments expectations."

Aanbevelingen

De NVAO onderschrijft alle aanbevelingen van de accreditatieorganisatie.

De NVAO verklaart het accreditatiebesluit van CTI equivalent op basis van de volgende vaststellingen:

- De buitenlandse accreditatie geeft een positieve beoordeling van de kwaliteit van de betrokken opleiding;
- De buitenlandse accreditatie is voldoende actueel;
- De buitenlandse accreditatie stoelt op een openbare externe beoordeling;
- De buitenlandse accreditatieorganisatie is EQAR-geregistreerd;
- De buitenlandse accreditatieorganisatie heeft een methodologische aanpak vergelijkbaar met de Vlaamse.

De NVAO,
Na beraadslaging,
Besluit:

Met toepassing van de Codex Hoger Onderwijs, in het bijzonder artikel II.149, besluit de NVAO accreditatie te verlenen aan de opleiding master in de ingenieurswetenschappen en master in de sociale en militaire wetenschappen (master) georganiseerd door de Koninklijke Militaire School. Deze opleidingen worden aangeboden te Brussel zonder afstudeerrichtingen.

De accreditatie geldt, overeenkomstig de door CTI aangegeven periode van zes jaar, van 1 september 2015 tot en met 31 augustus 2021.

Den Haag, 29 februari 2016

De NVAO
Voor deze:

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Ann Verreth
(vicevoorzitter)

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Naam instelling	Koninklijke Militaire School
Adres instelling	Renaissancelaan 30 1000 Brussel
Aard instelling	Federale instelling
Naam associatie	-
Naam opleiding	Master in de ingenieurswetenschappen Master in de sociale en militaire wetenschappen
Niveau en oriëntatie	Master
Bijkomende titel	Ingenieur (België) Ingénieur diplômé (Frankrijk)
Opleidingsvarianten: - Afstudeerrichtingen: - Studietraject voor werkstudenten	- -
Onderwijstaal	Nederlands, Frans
Studieomvang (in studiepunten)	180 studiepunten (bachelor) & 120 studiepunten (master)
ISCED studiegebied	52 Engineering and engineering trades 86 Military and defence

Voorzitter:

- Arnaud REICHART
CTI member ; Ingénieur en Chef de l'Armement ; Directeur adjoint ENSTA
ParisTech ;

Leden:

- Pascal RAY
CTI member ; Directeur École Nationale Supérieure des Mines de Saint Etienne;
- Christophe MEUNIER
CTI member ; Directeur SUPII MECAVENIR (Fédération des Industries
Mécaniques);
- Patrick GERLIER
Expert; Directeur adjoint École Nationale Supérieure de Techniques Avancées;
- Christiane MALCORPS BUTTIENS
International expert; National Director Solvay S.A. Belgium;
- Joffrey DUTTO
Engineering student expert; École d'ingénieur Universitaire Polytech Marseille;
- Theo VERHAGEN
International expert; Program manager of the basic research program V1320
"Munition Effects in Urban Operations"