

Faculty of Medicine



BCMM2MC Master complémentaire en biologie clinique (Complementary Master of Clinical Biology)



Programme management

CBIM Commission de biologie médicale

Academic Supervisor : Jean-Marie Scheiff

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Teaching Committee

President : J.-M. Scheiff.

Members : M. Bodeus, B. Chatelain, M. Delmée, Philippe de Nayer, V. Deneys, L. Galanti, J. Gigi, Y. Glupczynski, P. Goubau, C. Hermans, V. Haufroid, J.-M. Ketelslegers, D. Latinne, M. Philippe, J.-P. Tomasi, M.-Fr. Vincent and P. Wallemacq

Selection Committee

The Selection Committee for specialist candidate assistant doctors (MACCS, in French) is composed of members of the teaching Committee, to which are added two guest members and two co-opted members.

Study objectives

This complementary master's programme aims to prepare doctors to be recognised holders of the particular professional title of specialist doctor in Clinical Biology (Ministerial decree of the 15.09.1979, published on 26.09.1979, modified by the Ministerial decree of 26.04.1982, 03.09.1984 and 07.03.1985).

Admission conditions

- The applicant must hold the degree title of Doctor in Medecine or be a Doctor from a member country of the European Union authorising medical practice in Belgium.
- The applicant must be in possession of a document attesting that, at the end of the selection exams, he was retained as a specialist candidate in Clinical Biology, in a Belgian medical faculty.
- The entrance exam includes the evaluation of the study curriculum, compulsory work experience periods (2 months minimum) in Clinical Biology as well as an exam focussing on the three subject areas : medical biochemistry, microbiology and haematological biology.

The juridical context and practical procedures regarding these selection tests can be obtained from the secretary's office. Degree holders from outside the European Union are only allowed to register on the programme in the context of procuring a university certificate for partially specialised training for the duration of two years (if they are in the process of doing a specialisation in their country of origin) or for an in-depth specialised training course for the duration of one year (if they are already recognised as specialists in their own country).

The Royal Decree of the 30.05.2002, relating to the planning of the medical offer published on the 14.06.2002, applies to those candidates wishing to obtain the title of specialist doctor in Clinical Biology (those candidates are thus counted among the general practitioner candidates or specialists in the context of the numerus clausus).

Admission procedures

Applications for admission must be addressed to the academic supervisor.

The organisation of the entrance selection tests is arranged in accordance with the calendar and the general examination rules and regulations.

General structure of the programme

The training course includes full time apprenticeships in recognised services and teaching centres and lasts for at least five years. The apprenticeship project established by the university promoter must be approved by the ministerial validation committee for the speciality. These periods of practical training include being on call.

Candidates have the choice between **4 orientations** :

- Medical Biochemistry
- Microbiology
- Haematological Biology
- Polyvalent Clinical Biology

The first part (2 years) is common to the four orientations.

Programme content

Parallel to the practical training, the specialist candidate will follow a university training programme organised as follows :

First part : core syllabus for all orientations

The delivery of the core syllabus is carried out in an inter-university fashion, in collaboration with the ULB and the ULg.

Two years of training consisting of :

- Theory : 85 hours
- Seminars : 40 hours
- Supervised hospital training : 25 hours
- Four practical training periods of four months each, in chemistry, haematology and microbiology respectively, in laboratories approved by the Committee for clinical biology.

plus the following courses :

<u>FARM3180</u>	Compléments de biochimie médicale[60h] (in French)	Vincent Haufroid, Teresinha Leal, Diane Maisin, Marianne Philippe, Marie-Françoise Vincent, Pierre Wallemacq (coord.)
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[partim : 30h]

<u>BCMM3140</u>	Enzymologie clinique (avec travaux pratiques)[15h+15h] (in French)	N.
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[partim : 15h]

<u>BCMM3330</u>	Technics in microbiology[20h+30h] (in French)	Monique Bodéus, Michel Delmée (coord.), Jacques GIGI, Gerald Glupczynski, Patrick Goubau, Jean-Paul TOMASI
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<u>HEMA3100</u>	Methods in Haematological Biology[20h+10h] (in French)	Bernard Chatelain, Véronique Deneys, Jean-Marie Scheiff (coord.)
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<u>HEMA3110</u>	Seminars in Haematological Biology[20h] (in French)	Véronique Deneys, Jean-Marie Scheiff
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optional courses :

<u>SBIM3100</u>	Elementary quantitative analysis[22.5h] (in French)	Bernard Tilquin
<u>BCMM3310</u>	Informatique appliquée à la biologie clinique[15h+15h] (in French)	Benoît Debande, Jean-Marie Ketelslegers (coord.)

"Medical Biochemistry orientation "

First part

Core syllabus programme, described above.

Second part

Three years of training consisting of :

- Theory : 18 hours
- Seminars : 105 hours
- A period of supervised hospital training : 27 hours
- Three periods of one year full-time practical training in medical biochemistry in laboratories approved by the Committee of Clinical Biology.

Compulsory courses

<u>BCMM3340</u>	Special topics on clinical chemistry[105h] (in French)	Vincent Haufroid, Marianne Philippe, Pierre Wallemacq (coord.)
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<u>FARM3190</u>	Compléments de chimie toxicologique et phytopharmacie[22.5h+45h] (in French)	Pierre Wallemacq
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Optional courses

<u>INTR3350</u>	Séminaires d'endocrinologie[45h] (in French)	Martin Buysschaert, Chantal Daumerie, Michel Hermans, Dominique Maiter
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<u>FARM3320</u>	Principe et méthodologie des dosages radioimmunologiques et radionucléidiques[15h+40h] (in French)	Diane Maisin, Marianne Philippe (coord.)
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"Microbiology" orientation

First part

Core syllabus programme described above.

Second part

Three years of training consisting of :

- Theory : 150 hours
- Three one year periods of full-time practical training in laboratories approved by the Committee of Clinical Biology.

Compulsory courses

<u>MCBL3115</u>	Complements in microbiology[60h+90h] (in French)	Michel Delmée, Jacques GIGI (coord.), Gerald Glupczynski, Jean-Paul TOMASI
<i>[partim : 60h]</i>		
<u>MCBL3114</u>	New aspects on the use of autoimmune serology[15h] (in French)	Jean-Paul TOMASI
<u>MCBL3120</u>	Complements in Virology[45h+45h] (in French)	Monique Bodéus, Patrick Goubau (coord.)
<i>[partim : 45h]</i>		
<u>FARM2182</u>	Molecular genetics of the procaryotes and concepts of genetic engineering[30h+15h] (in French)	Etienne De Plaen, Jean-Noël Octave (coord.)
<i>[partim : 30h]</i>		
Optional courses		
<u>HOSP3160</u>	Hygiène hospitalière[15h] (in French)	Anne Simon
<u>BCMM3310</u>	Informatique appliquée à la biologie clinique[15h+15h] (in French)	Benoît Debande, Jean-Marie Ketelslegers (coord.)
<u>ESP3142</u>	Epidemiology[22.5h+7.5h] (in French)	Yves Coppieters 't Wallant
<u>FARM3160</u>	Compléments de bactériologie moléculaire[15h+50h] (in French)	N.
<u>MIGE3140</u>	Advanced Immunology[30h] (in French)	Pierre Coulie (coord.), Jean-Paul Coutelier, Dominique Latinne, Jean-Christophe Renaud, Benoît Van den Eynde, Pierre van der Bruggen
<u>FARM3180</u>	Compléments de biochimie médicale[60h] (in French)	Vincent Haufroid, Teresinha Leal, Diane Maisin, Marianne Philippe, Marie-Françoise Vincent, Pierre Wallemacq (coord.)
<u>SBIM3120</u>	Atelier de biologie moléculaire et techniques du génie génétique[15h] (in French)	N.

"Haematological Biology" orientation**First part**

Core syllabus programme described above.

Second part

Three years of training consisting of :

- Theory : 15 hours
- Seminars : 135 hours
- Three one year full-time training periods in haematological biology in laboratories approved by the Committee of Clinical Biology.

Compulsory courses

<u>HEMA3320</u>	Morphologie des organes hématopoïétiques et cytologie clinique[15h] (in French)	Jean-Marie Scheiff
<u>HEMA3330</u>	Protocoles de morphologie hématologique[45h] (in French)	Jean-Marie Scheiff
<u>HEMA3340</u>	Questions spéciales d'immunologie, d'immunohématologie et de transfusion[45h] (in French)	Véronique Deneys, Dominique Latinne
<u>HEMA3350</u>	Questions spéciales d'hémostase[45h] (in French)	Véronique Deneys, Cédric Hermans (coord.)

Optional courses

<u>INTR2181</u>	Compléments d'hémostase[15h] (in French)	Christian Chatelain, Véronique Deneys, Philippe Hainaut, Cédric Hermans (coord.)
<u>INTR2182</u>	Complements in Haematology[15h] (in French)	André Bosly, Chantal Doyen, Augustin Ferrant (coord.), Lucienne Michaux, Eric Van Den Neste
<u>INTR3510</u>	Séminaires d'hématologie clinique[30h] (in French)	André Bosly, Bénédicte Brichard, Bernard Chatelain, Véronique Deneys, Chantal Doyen, Augustin Ferrant (coord.), Cédric Hermans, Dominique

<u>HEMA3360</u>	Séminaires d'hématologie postgradués[8h] (in French)	Latinne, Eric Van Den Neste, Christiane Vermylen
<u>INTR3540</u>	Tours de salle d'hématologie[90h] (in French)	André Bosly, Augustin Ferrant (coord.), Christiane Vermylen
<u>MIGE3140</u>	Advanced Immunology[30h] (in French)	André Bosly, Augustin Ferrant (coord.) Pierre Coulie (coord.), Jean-Paul Coutelier, Dominique Latinne, Jean-Christophe Renaud, Benoît Van den Eynde, Pierre van der Bruggen

"Polyvalent Clinical Biology" orientation

First part

Core syllabus programme described above.

Second part

Three years of training consisting of :

- Theory : 50 hours
- Seminars : 100 hours
- Three full-time one year periods of practical training in medical biology, microbiology and haematological biology respectively, in laboratories approved by the Committee of Clinical Biology.

Compulsory courses

<u>BCMM3340</u>	Special topics on clinical chemistry[105h] (in French)	Vincent Haufroid, Marianne Philippe, Pierre Wallemacq (coord.)
<i>[partim : 50h]</i>		
<u>MCBL3115</u>	Complements in microbiology[60h+90h] (in French)	Michel Delmée, Jacques GIGI (coord.), Gerald Glupczynski, Jean-Paul TOMASI
<i>[partim : 29h]</i>		
<u>MCBL3120</u>	Complements in Virology[45h+45h] (in French)	Monique Bodéus, Patrick Goubau (coord.)
<i>[partim : 21h]</i>		
<u>HEMA3330</u>	Protocoles de morphologie hématologique[45h] (in French)	Jean-Marie Scheiff
<i>[partim : 15h]</i>		
<u>HEMA3340</u>	Questions spéciales d'immunologie, d'immunohématologie et de transfusion[45h] (in French)	Véronique Deneys, Dominique Latinne
<i>[partim : 20h]</i>		
<u>HEMA3350</u>	Questions spéciales d'hémostase[45h] (in French)	Véronique Deneys, Cédric Hermans (coord.)

[partim : 15h]

Optional courses

All the courses mentioned in the other orientations of the DES.

Evaluation

Presentation for the **exam** for compulsory courses at the end of the 2nd and 5th year.

Presentation of a thesis based on a publication in an international magazine of which the candidate is the first author. The subject of the thesis must be approved by the Committee.

Further to the application of the Royal Decree of 16 March, 1999, after the first two years of studies, the candidate will receive an attestation proving he has successfully accomplished a specific university training programme.

Upon fulfilment of the training requirements, described above, the teaching committee will award the academic title in Clinical Biology, specifying the orientation chosen.

This title does not replace official recognition by the ministerial validation committee. It attests the successful completion of an academic and scientific study programme in the context of specialised training leading to this validation.