BMS course overview 2022/2023

Profiles	Specialisations	More than one profile or specialisation
Consultancy profile	Clinical Human Movement Sciences	Moleculat Medicine / Immunology & Host Defense
Communication profile	Immunology & Host Defence	Communication profile / Health Technology Assessment
Research profile	Molecular Medicine	Communication profile / Research profile
	Drug Safety and Toxicology	Research profile / Health Technology Assessment
	Epidemiology	
	Heatlh Technology Assessment	
	Medical Neuroscience	

	A: Monday/ Tuesday	Titel	B: Thursday/ Friday	Titel	C: Wednesdays	
W36	MED-BMS24	Medical Neuroscience: Conceptual basics and anatomy	MED-BMS32	Medical Neuroscience: molecular and cellular neuroscience	MED-BMS11 (*part 1 of 8 week course*)*	Basic course on Regulations and Organisation for clinical investigators (BROK) (part 1 of 8 week course)
September	MED-BMS53	Orthopaedic biomechanics in motion	MED-BMS40	Nanomedicine		
	MED-BMS64	Molecular and cellular toxicology	MED-BMS54	Applied exercise physiology		
	MED-BMS75	Advanced tools in molecular biology	MED-BMS67	Chemical mutagenisis and carcinogenesis		
	MED-BMS77	Design of applied medical research	MED-BMS74	Inflammatory diseases		
	MED-BMS86	Introduction to Health Technology Assessment	MED-BMS78	Modern methods of data collection		
	MED-BMS88	Advanced Immunology	MED-BMS58	Cost-effectiveness analysis in health care		
W40	MED-BMS25	Medical Neuroscience: Functional imaging	MED-BMS30	Medical Neuroscience: Animal models for psychiatric and neurological disorders	MED-BMS11 (*part 2 of 8 week course*)	Basic course on Regulations and Organisation for clinical investigators (BROK) (part 2 of 8 week course)
October	MED-BMS43	From target to therapy	MED-BMS41	Advanced models of human disease	MED-BMS12	Research with ionizing radiation
	MED-BMS47	Biomarkers in population-based research	MED-BMS42	Targeting cellular processes to treat disease		
	MED-BMS55	From vascular function to vascular failure	MED-BMS50	Neural control of movement		
	MED-BMS62	Advanced modelling in economic evaluation	MED-BMS61	Statistical modeling in observational research		
	MED-BMS63	Biodynamic and toxicokinetic modelling	MED-BMS66	Reproductive Epidemiology and Toxicology		
W44	MED-BMS19	Vision: From molecule to perception and treatment	MED-BMS21	Neurodevelopmental disorders: bench to bedside	MED-BMS11 (*part 1 of 8 week course*) *	Basic course on Regulations and Organisation for clinical investigators (BROK) (part 1 of 8 week course)
November	MED-BMS29	Neurobiology of stress	MED-BMS33	Neural stem cells to model neurological disorders		
	MED-BMS39	Understanding proteins in 3D	MED-BMS37	Cell death in life and disease		
	MED-BMS48	Clinical trials	MED-BMS52	Disorders of movement		
	MED-BMS49	Movement science in rehabilitation	MED-BMS56	Health outcome measurement		
	MED-BMS65	Clinical toxicology	MED-BMS59	Prediction models and machine learning		
	MED-BMS72	Cancer development and immune defense	MED-BMS60	Human risk assessment		
	MED-BMS81	Applied medical research and society	MED-BMS76	Cell motility in physiology and pathology		
			MED-BMS89	Moving Science - using film in science communication		
W48	MED-BMS08	Qualitative research	MED-BMS05	Participatory approaches to innovation	MED-BMS11 (*part 2 of 8 week course*)	Basic course on Regulations and Organisation for clinical investigators (BROK) (part 2 of 8 week course)
December	MED-BMS13	Introduction to linear algebra and data analysis in MATLAB/PYTHON	MED-BMS07	Science, communication and society		
	MED-BMS16	Causal inference in observational research	MED-BMS14	Design and analysis of experiments		
	MED-BMS28	Stress-related disorders	MED-BMS31	OMICS data analysis for systems biology		
	MED-BMS85	Big data in biomedical sciences	MED-BMS51	Sensorimotor control		
	MED-BMS87	Applied Infectious Disease Epidemiology				
W02	MED-BMS02	Management skills for a consultant	MED-BMS03	Policy research		
January	MED-BMS09	Science presentation and visualisation	MED-BMS06	Science popularisation		
	MED-BMS23	Biomedical imaging: seeing is understanding	MED-BMS10	Laboratory animal science		
	MED-BMS27	Higher order cognition and emotion	MED-BMS17	Hands-on: genome data association analysis		
	MED-BMS38	Biomarkers: let's get personal	MED-BMS22	Vanishing boundaries between neurodevelopmental disorders		
	MED-BMS57	Health care improvement science	MED-BMS82	Applied Matlab for Biomedical Problems		
W06	MED-BMS01	Thinking Critically about Science	MED-BMS04	Policy making, health systems and public management in health care		
February	MED-BMS26	Neuroscience of sleep	MED-BMS34	Reconstructive and regenerative medicine		
	MED-BMS69	Tumors of the digestive tract	MED-BMS44	Mitochondrial disease drug development		
	MED-BMS71	Women's cancers	MED-BMS46	Healthy versus neurodegenerative brain aging		
	MED-BMS84	Longitudinal and multilevel data analysis	MED-BMS68	Innovative research in urological cancers		
W10	MED-BMS09	Science presentation and visualisation				
March	MED-BMS02	Management skills for a consultant				

* BMS11 is an 8 week course that runs in W36 + W40. You register for the entire course with the same registration deadlines as a regular W36 course.

* BMS11 is an 8 week course that runs in W44 + W48. You register for the entire course with the same registration deadlines as a regular W44 course.

Profile courses

Consultancy profile

Period	Code	Title	ECTS
W02A	MED-BMS02 * or MED-BMS57	Management skills for a consultant * of Health care improvement science	3
W02B	MED-BMS03	Policy research	3
W06B	MED-BMS04	Policy making, health systems and public management in health care	3
W48B	MED-BMS05	Participatory approaches to innovation	3

* *MED-BMS02 has another course edition in W10A (March)*

Communication Profile

Period	Code	Title	ECTS
W02B	MED-BMS06	Science popularisation	3
W48B	MED-BMS07	Science communication and society	3
W48A	MED-BMS08	Qualitative research	3
W02A **or** **W10A**	MED-BMS09	Science presentation and visualisation	3

Research profile

Students in the research profile should take at least 6 ECTS of research profile courses

Period	Code	Title	ECTS
W02A	MED-BMS09	Science presentation and visualisation	3
W02B	MED-BMS10	Laboratory animal science	3
W36/40 W44/48	MED-BMS11	BROK (*2 course editions of 8 weeks each*)	1.5
W40C	MED-BMS12	Research with ionizing radiation	1.5
W48A	MED-BMS13	Introduction to linear algebra and data analysis in MATLAB/PYTHON	3
W48B	MED-BMS14	Design and analysis of experiments	3
W44A	MED-BMS48	Clinical trials	3
W02B	MED-BMS82	Applied Matlab for Biomedical Problems	3
W06A	MED-BMS84	Longitudinal and multilevel data analyses	3
W48A	MED-BMS85	Big data in biomedical sciences	3
W44B	MED-BMS89	Moving Science - using film in science communication	3

Courses per specialisation

Immunology and Host Defence

Period	Code	Title
W36A	MED-BMS88	Advanced immunology
W36B	MED-BMS74	Inflammatory diseases
W40A	MED-BMS43	From target to therapy
W40B	MED-BMS42	Targeting cellular processes to treat disease
W44A	MED-BMS72	Cancer development and immune defense
W44B	MED-BMS37 *or* MED-BMS76	Cell death in life and disease Cell movements

Clinical Human Movement Sciences

Period	Code	Title
W36A	MED-BMS53	Orthopaedic biomechanics in motion
W36B	MED-BMS54	Applied exercise physiology
W40A	MED-BMS55	From vascular function to vascular failure
W40B	MED-BMS50	Neural control of movement
W44A	MED-BMS49	Movement science in rehabilitation
W44B	MED-BMS52	Disorders of movement

Epidemiology

Period	Code	Title
W36A	MED-BMS77	Design of applied medical research
W36B	MED-BMS78	Modern methods of data collection
W40A	MED-BMS47	Biomarkers in population-based research
W40B	MED-BMS61	Statistical modeling in medical research
W44A	MED-BMS81	Applied medical research and society
W44B	MED-BMS59	Prediction models and machine learning

Health Technology Assessment

Period	Code	Title
W36A	MED-BMS86	Introduction to Health Technology Assessment
W36B	MED-BMS58	Cost-effectiveness analysis in health care
W40A	MED-BMS62	Advanced modelling in economic evaluation
W44A	MED-BMS48 *	Clinical trials *
W44B	MED-BMS56	Health outcome measurement
W48A	MED-BMS08	Qualitative research

***** *In 2021-2022 MED-BMS61 'Statistical modeling in medical research' was part of the HTA specialisation. This has been replaced by MED-BMS48. MED-BMS61 is still part of the BMS course offering and is still recommended for HTA students.*

Drug Safety and Toxicology

Period	Code	Title
W36A	MED-BMS64	Molecular and cellular toxicology
W36B	MED-BMS67	Chemical mutagenesis and carcinogenesis
W40A	MED-BMS63	Biodynamic and toxicokinetic modeling
W40B	MED-BMS66	Reproductive Epidemiology and Toxicology
W44A	MED-BMS65	Clinical toxicology
W44B	MED-BMS60	Human risk assessment

Molecular Medicine

Period	Code	Title
W36A	MED-BMS75	Advanced tools in molecular biology
W36B	MED-BMS40	Nanomedicine
W40A	MED-BMS43	From target to therapy
W40B	MED-BMS42	Targeting cellular processes to treat disease
W44A	MED-BMS39	Understanding proteins in 3D
W44B	MED-BMS37 *or* MED-BMS76	Cell death in life and disease Cell movements

Medical Neuroscience

Period	Code	Title
W36A	MED-BMS24	Medical Neuroscience: Conceptual basics and anatomy
W36B	MED-BMS32	Medical Neuroscience: molecular and cellular neuroscience
W40A	MED-BMS25	Medical Neuroscience: Functional imaging
W40B	MED-BMS30	Medical Neuroscience: Animal models for psychiatric and neurological disorders