



EXPLORE A WORLD OF **POSSIBILITIES**

BSc HEALTH AND MEDICAL SCIENCES
MSci INTEGRATED SCIENCE

UNDERGRADUATE 2021 PROSPECTUS

WARWICK

MEDICAL SCHOOL

Welcome to Warwick Medical School

This is an exciting time for Warwick Medical School (WMS) having recently launched two new undergraduate degrees in Health and Medical Sciences and Integrated Science.

WMS is a large School within the University of Warwick, which is consistently rated in the top 10 of UK universities. Students who join us become part of a large and vibrant community of students, educators and researchers.

WMS has a proven track record in excellence in teaching. Our established MB ChB, which is the largest graduate entry programme in the UK, produces high quality doctors. We also offer a range of postgraduate Master's, Diplomas and Certificate programmes, which are undertaken by national and international healthcare professionals across a variety of medical specialities. We are passionate about teaching, but we are equally passionate about research.

During your time with us we aim to help you develop your potential, both academically and personally. This will be the first step in your career. You can be assured of our support throughout your time at Warwick.

We will help you to make the most of the opportunities available to you both on the course itself and through the myriad of extra-curricular activities available. With over 250 student societies Warwick has one of the largest Students' Unions in the country, so there is plenty to get involved in.

We recommend where possible that you come along to one of the University's open days so you can visit our School and get a feel for campus life. You can find the full details of upcoming open days on our webpage at warwick.ac.uk/opendays.

We look forward to welcoming you to Warwick Medical School.

Professor Sudhesh Kumar, OBE
Dean of Medicine

We're so pleased that you're interested in our innovative and challenging undergraduate courses, BSc Health and Medical Sciences and MSci Integrated Science.

We have developed our distinctive programmes to draw directly on our strengths in teaching and research, and the educational offer described in this prospectus reflects our passion for these important and inspiring subject areas.

Studying at WMS, you will be part of a vibrant undergraduate community on the Gibbet Hill campus. The friendly and supportive environment within our School enables our students to be the very best they can be;

as well as our excellent course teams, you will be supported by a wider undergraduate team including our Director of Student Experience, your personal tutor and the student welfare team, our careers consultant and excellent departmental administrators.

We anticipate that you will find studying with us challenging but also enjoyable, stimulating and rewarding, and that it will support your career aspirations. We look forward to meeting you!

Dr Lucy Hammond
Deputy Pro Dean Education and Director of Undergraduate Studies



Welcome from Life Sciences

We are delighted to participate in the exciting MSci Integrated Science course. The School of Life Sciences offers an outstanding student experience through its undergraduate degree portfolio. This venture provides a fantastic opportunity to deliver a genuinely innovative course in close collaboration with WMS. Alongside the pastoral and academic support offered by WMS staff, you will be involved in many teaching activities in SLS during your second and third year – a great opportunity to be part of the Gibbet Hill student community and to get to know life scientists operating across a wide range of disciplines. We look forward to welcoming you.

Professor Lorenzo Frigerio
Head of the School of Life Sciences



How do we ensure your success?

We provide you with a supportive and stimulating learning environment, which enables you to take advantage of the many opportunities available at Warwick.

At Warwick Medical School, you can expect to feel welcome, known, supported and that you have everything you need to reach your potential. We cherish diversity and take pride in supporting each of you as individuals throughout your academic journey to have the best student experience. Throughout your degree, we will enable you to develop close relationships with your peer group, our lovely teams and to get involved with life across the campus so you will feel at home here and part of the Warwick community, and crucially be well prepared to succeed in your chosen careers post-graduation.

Emily Reid
Director of Student Experience

Pastoral support

Our senior tutors will work alongside your personal tutors to ensure your welfare while you are studying with us. This is a new course taking a unique approach. We recognise it will be an adventure, and at times a challenge, for instructors and students. We will work closely with you as you move through the curriculum and identify any areas where you need additional support.

Computing skills

The Integrated Science degree will require good quantitative skills. To develop the necessary mathematical and statistical skills, your first year will include Wednesday morning "eLabs" sessions, during which informal coaching will be available to enhance your computer skills. During your second and third years, the School of Life Sciences runs QuBiC, a daily drop-in service to support you with the quantitative content of your degree.

Student Staff Liaison Committee

The Student Staff Liaison Committee is made up of student representatives from all undergraduate courses and members of staff. The Committee provides a space for students to discuss anything related to teaching, learning and student support. The SSLC is one of the ways in which you can get involved in the running of the School.

BioMed Grid

To support your study, you will have full access to the BioMed Grid. This is a great learning environment with textbooks, careers information, video editing, SMART boards, plasma screens and presentation rooms.

Additional course activities

There will be opportunities for you and your cohort, with support from the academic team, to run a programme of evening events. For example, you will be able to invite speakers, including external speakers, to the University to give talks. You might want to invite famous scientists, journalists, or postgraduate students to talk about their experiences.

BioSoc

A student-run society open to all years, helping everyone make the most of their time as a student here. BioSoc runs peer support sessions offering advice and guidance and a range of local volunteering opportunities, from teaching in schools to charity work. Attending BioSoc social events is a great way to meet new people at the University. In addition, there are over 250 other societies at the University, catering from sports to performance to academic interests.

Transferable skills

As an undergraduate student at WMS, you will develop a range of transferable skills including:

- Interpersonal skills
- Critical thinking
- Ability to synthesise evidence and information across disciplines from multiple perspectives
- Team working
- Ability to construct novel solutions or transfer solutions across settings to solve problems
- Time management
- Project planning and delivery
- Digital literacy and the ability to scrutinise digital solutions from different viewpoints

- Analytical and numerical skills
- Advanced communication skills, including the ability to inform multiple and varied audience types

We will work together with you to identify your support needs as you progress through the curriculum. We will identify any areas where you need additional support and we will provide that support. There will be a focus on contact and personal development time, enabling you to work with expert academics with an adaptable approach.

To help you settle in, you will be allocated an academic member of staff as a personal tutor. Your personal tutor normally stays with you throughout your degree and is your first point of call for any academic queries or concerns. Regular contact with your personal tutor throughout your course provides one-to-one support for your academic work and career development. Our senior tutors will also work alongside your personal tutors to ensure your welfare and wellbeing while you are studying with us.



What are my career prospects?

As these are new courses, there are no graduates for either programme yet. Outlined below and across are roles and organisations that graduates from similar courses have gone on to.

Health and Medical Science

Graduates will be positioned to move into a range of work areas which impact on health, including, but not limited to:

- Public Health, health promotion and surveillance
- Corporate social responsibility
- Industrial and graduate training programmes in health
- Non-governmental organisations
- Health service management and administration
- Biomedical or health sciences research
- Community engagement and transformation in health
- Graduate entry to health and clinical education programmes

Integrated Science

Graduates from similar courses in the US have gone on to make careers in a wide variety of areas such as:

- Biotechnology
- Computing
- Philanthropy
- Medicine
- Engineering
- Medical Research

Employer destinations that graduates from similar courses have gone on to include:

Health and Medical Science

- NHS
- World Health Organisation
- Public Health England
- NICE

Integrated Science

- NHS
- AstraZeneca
- PMG
- Taylor and Francis Scientific Publishing
- Diabetes UK



Facts and figures

The University of Warwick is consistently ranked highly in university league tables:



4TH MOST TARGETED UNIVERSITY
BY THE UK'S **TOP 100**
GRADUATE EMPLOYERS

WE ARE ONE OF THE UK'S TOP 10 UNIVERSITIES AND 1ST IN THE WEST MIDLANDS

(THE TIMES AND SUNDAY TIMES GOOD UNIVERSITY GUIDE 2019).



WE WERE RANKED 7TH OVERALL AMONG UK RESEARCH UNIVERSITIES

IN THE MOST RECENT RESEARCH EXCELLENCE FRAMEWORK



NEW WORLD NEW THINKING

BSc HEALTH AND MEDICAL SCIENCES



BSc Health and Medical Sciences

Wherever we look in the world, health and medical services are struggling to cope with rising demand and the increasing burden of disease. Advances in the scientific understanding of health and disease along with new technological developments offer exciting opportunities for improved health, but also present novel challenges to our health systems in terms of affordability, sustainability, and equity. The societies we live in and the lifestyles we adopt influence our health. Increasing sedentary behaviours, the need for new drugs, extended lifespan, poor diet and continuous exposure to stressful conditions are adding to the burden of disease. In addition, locally and globally, conflict and poverty continue to drive the creation of living environments that adversely affect health.

Solutions to health problems, like the origins of problems themselves, must be multi-faceted. Policy developers, non-governmental agencies and health workers must work alongside researchers, health professionals and industry to promote holistic solutions.

Multi-disciplinary solutions need individuals who have the skills to work across and within these areas, understanding

underpinning science, identifying innovative solutions and acting as facilitators and analysts able to work across boundaries to be an agent for change.

If you are interested in the integrated scientific study of problems in human health and their impact on society, we want you to join us. We are confident that our course will give you the vital skills and knowledge to be able to make a valuable contribution and bring about change.

We look forward to welcoming you to Warwick Medical School.

Professor David Davies
Course Director

Dr Leda Mirbahai
Medical Sciences Theme Lead

Dr Hollie White
*Health Sciences
Theme Lead*

Dr Farhan Noordali
*Health Sciences
Theme Lead*



Why study Health and Medical Sciences?

If you decide to come to Warwick Medical School, you'll join a vibrant community of students, educators and researchers. We have a proven track record in excellence in teaching. We're equally passionate about research as we are about education, and you will have internationally-renowned research academics working with you throughout your course.

BSc Health and Medical Sciences is delivered over three years full time and is designed to enable students to address current local and global problems in health through the integrated perspectives of health and medical sciences, aligned to the following problem areas; non-communicable disease, infectious disease, physical health, mental health, nutrition, and civil strife and displacement. The modules you will study bring together these topics into an integrated student experience.

Entry requirements

Our entry requirements are either AAB including one subject from this list: Applied Science, Biology, Chemistry, Computer Science, Environmental Science, Maths, Physics, Psychology, Physical Education, Statistics (Biology is recommended) or ABB including two subjects from the list above. A minimum of 36 points is required for International Baccalaureate students (with one of the listed subjects, 34 points if students have two) and we welcome applications from students taking BTECs. We welcome applications from students with other nationally recognised qualifications.

For more information, please visit: warwick.ac.uk/intentryreq

Contextual data and differential offers

Warwick may make differential offers to students in a number of circumstances. These include students participating in the Realising Opportunities programme, or who meet two of the contextual data criteria.

Please visit our website to find out more: warwick.ac.uk/hms



How will I learn?

Health and Medical Sciences

The course encourages engagement and active involvement in a broad range of structured and specifically designed learning activities centred around real-world cases. This case-based learning approach will allow you to develop problem-solving skills and integrate your learning, working closely with your peers in small teams.

Online

As an additional feature of the course, some of the content will be delivered wholly online to give flexibility and to develop personal responsibility in your studies.

Directed learning activities

Alongside online learning, project work, additional reading and reflection as well as preparations for group work and assessed elements will take up the rest of your time.

Small Groups

As a new course we expect the class size to be around 50 for full cohort sessions, small group activities will be in groups of around 10 students.

Case-based learning

Case-based learning is a signature educational approach at Warwick Medical School that will permeate the course and offer opportunities for interdisciplinary problem solving using authentic contemporary examples of problems in health.

Assessment

The course includes a mix of examinations, written course work, presentations and skill-based assessment types.



Course overview

This course is designed for applicants who have a passion for the integrated study of problems in health and their impact on society: understanding how the application of advances in health, wellbeing and medical sciences can improve health outcomes for individuals and populations, and how to bring about change by working in multidisciplinary teams.

As you progress through the course, curriculum topics may be re-visited from time to time from different perspectives enabling your integrated knowledge and understanding to deepen as you develop as a learner.

YEAR 01 ▶

- Concepts in Health and Medical Science
- Systems: Cell to Society
- Illness: Susceptibility and Inequality
- Wellbeing: Mental Health and Neurobiology
- Methods of Enquiry

YEAR 02 ▶

- Food: Nutrition and Malnutrition
- Infection: Prevention and Outbreaks
- Interactions: Environment and Genes
- Pathways to Work in Health

YEAR 03 ▶

- Project Planning
- Advanced Cases
- Making a Difference with Research and Science
- Technology and Health
- Dissertation Project
- Transdisciplinary Perspectives

Optional modules

Year two you may choose a University approved optional module from the catalogue, this may be an Institute of Advanced Teaching and Learning (IATL) module or could be from a variety of other departments, for example, Global Sustainable Development (GSD) or languages.

MSci Integrated Science

MSci Integrated Science aims to equip you with the skills and knowledge to pose and answer scientific questions, by drawing freely on the methods and mindsets of mathematics, physics, biology, chemistry and computation. By combining the strengths of Warwick's Medical School (WMS) and School of Life Sciences (SLS), our course offers you unique opportunities to develop yourself as a scientist, overseen by - and working with - outstanding professional researchers.

MSci Integrated Science has a new structure, designed to support your development as a scientist. During your first year, your time will be divided into two-week blocks, with each block driven by a single scientific question. Each block blends classroom instruction, team-based problem solving, original laboratory-based research and individual study. From day one, you will spend approximately half your time in the lab, building up your experimental skills by working on unsolved scientific problems, under the guidance of an expert block-lead. As your year progresses, the scientific problems we tackle together will gradually increase in scale - starting with Atoms and Molecules and working up to Organisms and Populations.

Throughout, we will support you to think creatively and quantitatively, formulate problems effectively and work efficiently to solve them using methods chosen from a range of scientific disciplines. In your second and third years, this integrated approach continues, combined with a deeper look into the molecular and cellular basis of life, using existing, highly successful modules run by SLS. In your fourth year, you will join a WMS research lab, be supervised by the lab head and focus almost entirely on a research project that you have chosen.

We invite you to discover more about this innovative course, which we hope you find as exciting as we do!

Professor Robert Cross
Course Director

Professor Andrew McAinsh
Co-director

Professor Mohan Balasubramanian
Co-director



TAKE A CLOSER LOOK

MSci INTEGRATED SCIENCE

Why study Integrated Science?

MSci Integrated Science is a unique new course that aims to teach you how to frame and solve scientific problems in a “without-boundaries” way.

MSci Integrated Science provides you with a framework to integrate your thinking and your experimental approaches across the sciences, with a focus on biological processes. We want you to become the best scientist you can be, able to draw freely on the methods and mindsets of mathematics, physics, biology, chemistry and computation.

By combining the strengths of Warwick’s Medical School (WMS) and School of Life Sciences (SLS), our course offers you unique opportunities to develop yourself as a scientist, overseen by - and working with - outstanding professional researchers.

Entry Requirements

MSci Integrated Science is a four-year course. You will have a passion for science and be predicted AAA at A level or equivalent, or a minimum of 38 International Baccalaureate points. You must be studying Maths and either Biology or Chemistry. We welcome applications from students with other internationally recognised qualifications.

For more information please visit:
warwick.ac.uk/study/international/admissions/entry-requirements

How will I learn?

Integrated Science

The course draws upon a wide range of teaching approaches, including lectures, seminars, practical laboratory sessions, group work and tutorials. A key feature of the course is the large amount of laboratory work, which exposes you to experimental approaches and techniques to enable you to perform original research right from the outset of the programme.

Classroom learning

Lectures will be delivered by an active researcher in the field, drawing on cross-disciplinary concepts and teaching the underlying principles and data handling techniques you will need to document and analyse your experimental laboratory work.

Problem sets

Working with your peers, you will be presented with real-world scientific problems and tasked with identifying solutions, drawing on understanding gained from lectures and discussions.

Laboratory experiments

Working in small teams and guided by active research scientists with international reputations, you will conduct experiments that address original, unsolved scientific problems. The course team at Warwick will provide extra support to those with limited experience in laboratories.

E-labs

You will be provided with a laptop. Using this, you will be taught computer coding skills, predominantly using Python. This will enable you to collect and efficiently analyse data.

Assessment

Assessment over the four-year course will be done in multiple ways, including formal examinations, written lab reports and presentations.

Course overview

YEAR 01 ▶▶

- Foundational Molecular Biology
- Foundational Computational Skills
- Atoms and Molecules - lectures and labs
- Organelles and Cells - lectures and labs
- Organisms and Populations - lectures and labs

YEAR 02 ▶▶

- Integrated Science: Molecular Cell Biology
- Integrated Science: Evaluation and Presentation of Evidence
- Tools for Biochemical Discovery
- Enzymology
- Protein structure and function
- Neuropharmacology
- Molecular Endocrinology

plus, one of:

- Neurobiology
- Evolution
- Genetics and Genomics
- Immunology
- Ecology and its Applications
- Microbial Pathogens

YEAR 03 ▶▶

- Protein Targeting
- Biological Clocks
- Structural Molecular Biology
- Dynamics of Biological Systems
- Research Project
- Integrated Science: experimental design and analysis

plus, two of:

- Advanced Immunology
- Integrative Neuroscience
- Oncology
- Bioenergy and Refining
- Synthetic Biology
- Principles of Development
- Extreme Environmental Biology

YEAR 04 ▶▶

- Extended Research Project (students join a WMS laboratory)
- Frontier Techniques and Research Skills
- Research Topics in Interdisciplinary Biomedical Research
- Warwick Interdisciplinary Transferable Skills

Course Key

- WMS Content delivered by Warwick Medical School
- SLS Content delivered by School of Life Sciences



How do I apply?

Applications are made through UCAS. The UCAS code for Warwick is WARWKW20. The course code for **BSc Health and Medical Sciences** is **B990** and the course code for **MSci Integrated Science** is **CF10**. For more information visit: ucas.com

We strongly encourage you to visit the University to see the campus for yourself and to get a sense of the student experience here at Warwick. If you can't make a trip to Warwick, please visit our website for further information: warwick.ac.uk/campusvisits

Once you have applied and have an offer, you will be invited to an offer holder open day where you will be given the opportunity to talk to academic staff and current students and have a look around the Medical School and the University.

Successful applicants will be made an offer as soon as possible after their application is received. The offer will be conditional on already having or obtaining the required entry qualifications. If you accept this offer and achieve the required grades, your place at the University of Warwick will be confirmed and we will look forward to seeing you at the start of your undergraduate life.

More details can be found on our website: warwick.ac.uk/apply

Overseas applicants

The University has a large number of international students and here at Warwick Medical School we warmly welcome your application. We are a diverse department with students and staff from all over the world studying and working together. We have a very safe campus and an extensive support structure to encourage your success.

Local advice about the application procedure is available from all British Council offices and Warwick representatives.

Visit our webpages for more information: warwick.ac.uk/international



What else might I need to know?

Student fees and funding

The University wants to ensure that wherever possible financial circumstances do not become a barrier to studying at Warwick. We provide extra financial support for qualifying students from lower income families.

warwick.ac.uk/additionalcosts

 [Warwickfinancefunding](https://www.facebook.com/Warwickfinancefunding)

Accommodation


Warwick Accommodation has over 6,400 rooms across a range of residences. All rooms are self-catered. Each of the campus residences is fully managed and has an excellent network of support staff in the Residential Life Team.

warwick.ac.uk/accommodation

Helping you find the right career

You will have access to specialist Medical School careers advice and opportunities to speak with graduate recruiters, through our Student Careers team.


warwick.ac.uk/careers

 [WarwickStudentOpportunity](https://www.facebook.com/WarwickStudentOpportunity)

Warwick Students' Union

One of the largest and most active students' unions in the country, Warwick SU is the focal point of campus life here at Warwick.

warwicksu.com

 [warwicksu](https://www.facebook.com/warwicksu)

Wellbeing support

The University has a comprehensive welfare structure in place to ensure that you can easily access advice and guidance throughout your time here.

warwick.ac.uk/supportservices

Visit us

We recommend where possible that you come along to one of the University's open days so you can visit our School and get a feel for campus life. You can find the full details of upcoming open days on our webpage.

warwick.ac.uk/opendays





EXPLORE A WORLD OF POSSIBILITIES

Contact us

To enquire further about the course, entry requirements, application process or any other admissions related query contact:

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University of Warwick
Gibbet Hill
Coventry
CV4 7AL

☎ +44 (0) 24 76 150567

BSc Health and Medical Sciences

✉ wms.hms@warwick.ac.uk
🌐 warwick.ac.uk/hms

MSci Integrated Science

✉ wms-ug-is@warwick.ac.uk
🌐 warwick.ac.uk/intsci

Get to know us

To find out more about life at WMS, including information about our events, student experiences and our latest research, connect with us on our social media networks.

📷 @warwickmedschool

🐦 @warwickmed

📘 @warwickmedschool

Disclaimer: This information was correct at time of printing. Our courses, modules and schedules are continually revised and updated to reflect the latest research expertise at Warwick so it is therefore very important that you check the website for the latest course information before you apply and accept your offer.