Course Summary: March 27, 2026

Naval Architecture and Marine Engineering MEng Honours

- UCAS code: **H517**
- Full time
- 4 years

This four-year MEng Honours degree focuses on the design and operation of marine vehicles and offshore infrastructure. The course includes a year of advanced study at master's level, leading to Chartered Engineer status.

You are currently viewing course information for entry year: **2026**

Next start date:

- September 2026

Tuition fees (Year 1)

- Home: **£9,790**
- International: **£30,700**

Entry requirements and offers

- A-Level: **AAB**
- IB: **34 points**

UCAS Institution name and code:

- NEWC / N21

Undergraduate Open Day

Start your university journey. Find where you belong. Friday, June 26 (9:00-16:00) Saturday, June 27 (9:00-16:00)

Book your place now

Course overview

Our degree in Naval Architecture and Marine Engineering focuses on the design and operation of marine vehicles and offshore infrastructure. You'll learn how to design specialist systems using the latest technologies.

We design our curriculum and projects with leading companies. You'll take part in our annual design pitch, where you can showcase your project work to industry partners.

Working on multidisciplinary team projects, you'll gain hands-on experience in key areas such as:

- energy applications
- marine vehicle design
- marine technologies
- experimental and numerical analysis

Stage 4 focuses on master's-level study, which includes specialised modules and enhances your technical expertise.

BEng or MEng?

Both our BEng and MEng degrees provide a pathway to becoming a Chartered Engineer. This is one of the most recognisable international engineering qualifications.

Our MEng degrees are a direct route to becoming a Chartered Engineer (CEng). You don't need to study any more qualifications after your degree to work towards chartered status.

Our three-year BEng degrees can also lead to Chartered Engineer status. However, you'll need to complete further study, such as an approved master's degree.

Transfer from a BEng to an MEng degree is possible up to the end of Stage 3 if you achieve the appropriate academic standard.

Read about our BEng course in Naval Architecture and Marine Engineering

Your course and study experience - disclaimers and terms and conditions
Please rest assured we make all reasonable efforts to provide you with the programmes, services and facilities described. However, it may be necessary to make changes due to significant disruption, for example in response to Covid-19.

View our Academic experience page, which gives information about your Newcastle University study experience for the academic year 2025-26.

See our terms and conditions and student complaints information, which gives details of circumstances that may lead to changes to programmes, modules or University services.

Additional information

Exploring a specialism

Specialising in an area of interest will develop your knowledge and expertise. In Stage 4, you can choose to study one of the following specialisms:

Naval Architecture & Ocean Engineering

Focuses on the advanced structural and hydrodynamic analysis of ships and small craft.

Marine Engineering

Explores key aspects of power transmission, systems and digitalisation of ship machinery.

Quality and ranking

Professional accreditation and recognition

All professional accreditations are reviewed regularly by their professional body.

Modules and learning

Modules

The information below is intended to provide an example of what you will study.

Most degrees are divided into stages. Each stage lasts for one academic year, and you'll complete modules totalling 120 credits by the end of each stage.

Our teaching is informed by research. Course content may change periodically to reflect developments in the discipline, the requirements of external bodies and partners, and student feedback.

Optional module availability
Student demand for optional modules may affect availability.

Full details of the modules on offer will be published through the Programme Regulations and Specifications ahead of each academic year. This usually happens in May.

To find out more please see our terms and conditions

You'll gain a broad introduction to the principles of engineering. You'll study engineering in a marine context through the specialist module Marine Design and Professional Skills.

Modules

Compulsory Modules	Credits
Engineering Mathematics I	20
Electrical and Magnetic Systems	15
Electronics and Sensors	10
Thermofluid Mechanics	15
Properties & Behaviour of Engineering Materials	15
Mechanics I	15
Marine Design and Professional Skills	30

You'll gain a firm foundation in engineering principles covering topics in core subjects, including ship hydrodynamics and engineering mathematics, which we relate to the broad scope of marine technology.

Modules

Compulsory Modules	Credits
Engineering Mathematics II	10
AC Electrical Power and Conversion	10
Business and Law for Engineers	10
Further Naval Architecture	20
Marine Engineering II	20
Ship Hydrodynamics	20
Applications of Engineering II	10
Marine Structures I	20

You'll continue with core modules to develop your knowledge. You'll study specialist modules including ship and system design and marine production management. You'll also complete a dissertation.

Modules

Compulsory Modules	Credits
Marine Transport Business	10
Marine Engineering III	20
Further Ship Hydrodynamics	20
Marine Production Management	10
Ship and Systems Design	30
Dissertation in Maritime Engineering	30

This further year of study deepens your naval architecture skills & marine engineering skills to master's level. You take further specialist modules depending on your chosen stream.

You'll also work on a final group design project that equips you with professional-standard skills that lead directly to chartered engineer status.

Modules

Compulsory modules

Compulsory modules	Credits
Team Project in Maritime Engineering	40
Ship Performance and Advanced Technology	20
Experimental and Computational Modelling of Marine Systems	20

You also follow one of the specialism streams below:

Naval Architecture & Ocean Engineering

Compulsory modules	Credits
Ocean Energy Systems Engineering	20
Structural and Risk Analysis of Ships and Offshore Energy Systems	20

Marine Engineering

Compulsory modules	Credits
Marine Systems and Digitalisation	20
Design of Mechanical Power Transmissions	20

Teaching and assessment

Teaching methods

Contact hours will be a combination of:

- lectures
- seminars from invited speakers in industry and academia
- practical work

Assessment methods

You'll be assessed through a combination of:

- Coursework
- Dissertation or research project
- Examinations – practical or online
- Group work
- Presentations
- Reports

Skills and experience

Practical skills

You'll gain invaluable hands-on experience with our state-of-the-art facilities. These include:

- a model-testing towing tank
- our unique wind, wave and current tunnel
- advanced computing facilities
- our cavitation tunnel, which is the largest commercial propeller test tunnel in the UK

Throughout your studies, you'll also take part in a range of exciting industry visits. You'll explore local and national marine production facilities and infrastructure sites, giving you direct insight into the dynamic world of maritime engineering.

Real business skills

We design our curriculum and projects with leading companies. You'll take part in our annual design pitch, where you can showcase your project work to industry partners. You'll learn invaluable career skills including delivering a pitch and negotiation.

Your practical and professional skills will develop through interactions with industry.

Research skills

You'll develop strong research skills as you undertake practical lab work, as well as a dissertation in Stage 3, and a group project in Stage 4. Access to our extensive library resources, specialised software, and advanced experimental testing facilities will support you through your course.

Opportunities

Work placement

Get career ready with a work placement and leave as a confident professional in your field. You can apply to spend 9 to 12 months working in any organisation in the world, and receive University support from our dedicated team to secure your dream placement. Work placements take place between stages 3 and 4.

You'll gain first-hand experience of working in the sector, putting your learning into practice and developing your professional expertise.

If you choose to take a work placement, it will extend your degree by a year. Placements are subject to availability.

Find out more about work placements

You will have the opportunity to discuss your postgraduate career and work placements with our industry partners during our annual OCEANS careers fair.

Facilities and environment

Facilities

You'll be part of the School of Engineering and you'll learn in state-of-the-art labs and fantastic facilities, many of which are unique to Newcastle University. You'll have access to our:

- unique large-scale laboratories to help you learn and understand concepts taught in class
- Blythe Marine Station and our high-speed research vessel, The Princess Royal
- cavitation tunnel to test models of propellers, turbines, submarines and more
- towing tank to conduct ship and offshore model tests
- combined wind, wave and current tank to experience modelling of the full offshore environment
- hydrodynamics laboratory with wave-making and electronic recording equipment
- engine laboratories, which include facilities to test diesel engines
- dedicated computer cluster running specialist marine design software
- university, regional and national HPCs (High-Performance Computing)
- specialist marine technical library and historical archive

Support

At Newcastle, you'll join a vibrant, global community of staff and students in the School of Engineering.

To support you in your studies, all new students entering year 1 or year 2 will receive a start-up pack containing essential personal protective equipment.

You'll have the support of an academic member of staff as a personal tutor throughout your degree to help with academic and personal issues.

Peer mentors will help you in your first year. They are fellow students who can help you settle in and answer any questions you have when starting university.

Your future

Join a network of successful graduates

You'll benefit from our strong industrial links with:

- Lloyd's Register
- Babcock
- BP
- BAE Systems
- the Royal Navy
- British Maritime Technology (BMT)
- Royal IHC
- Technip FMC
- ABS
- Society of Maritime Industries (SMI)
- Equinor
- Eurobulk Ltd
- Sonardyne
- Kairos Technology
- Cammell Laird
- North Star
- Lloyd's Register Marine
- Disney Cruise Line

Recent graduates have taken up roles such as:

- graduate engineer
- naval architect
- development engineer
- project engineer
- graduate naval architects

- Royal Navy trainee officer
- graduate technical officer

Be part of a thriving sector

The marine technology sector is currently thriving worldwide and in many areas there are acute shortages of skilled personnel.

UK-based and multinational companies have a demand for degree-qualified:

- marine engineers
- naval architects
- experts in computer-aided design
- engineering specialists
- production specialists and managers
- surveyors
- research and policy development

A large proportion of Marine Technology graduates find employment in:

- the ship and offshore construction industry
- shipping and offshore companies
- government departments
- classification societies
- regulatory agencies and consultancy firms
- offshore renewable energy generation

The development of deep-water oil and gas recovery has increased demand for specialists in the design and operation of offshore vessels and processing plants.

An increasing number of graduates enter careers in the design and manufacture of yachts, luxury cruisers and high-speed passenger craft.

A number of our students also go on to postgraduate study and research into new technologies.

Make a difference

Careers support

You'll be given networking opportunities through our close connections to industry and professional marine organisations.

We also organise a marine careers fair every year, attracting graduate recruiters such as:

- Lloyd's Register
- Babcock
- BP
- BAE Systems
- the Royal Navy

Our Careers Service is one of the largest and best in the country, and we have strong links with employers. We provide an extensive range of opportunities to all students through our ncl+ initiative.

Visit our Careers Service website

Recognition of professional qualifications outside of the UK

If you're studying an **accredited degree** and thinking about working in Europe after you graduate, the best place to find current information is the UK Government's guidance on recognition of UK professional qualifications in EU member states. This official resource explains whether your profession is regulated in another country, what steps you need to take, and which organisation you should contact.

Additional information

Singapore study option (international students)

Working with the Singapore Institute of Technology, Newcastle University offers full-time BEng Honours degrees in Singapore, in:

- Marine Engineering
- Offshore Engineering
- Naval Architecture

These provide international students with the opportunity to study marine technology subjects from Newcastle University in Singapore.

Find out more...

- Go online for information about our full range of degrees: **www.ncl.ac.uk/undergraduate**
- Watch videos about student life in Newcastle by visiting our YouTube channel at **www.youtube.com/@newcastleuni**
- Watch a virtual tour of our campus at **https://youtu.be/vJUfHcqB7l8?si=8IUrf7kTxXbgdfr1**
- Book for an Open Day to come and see us in person **www.ncl.ac.uk/openday**
- Contact us online at **www.ncl.ac.uk/enquiries** or phone +44 (0)191 208 3333

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