



HNC/HND ENGINEERING **AT KIRKLEES COLLEGE** **ENGINEERING CENTRE**

OVERVIEW OF COURSE STRUCTURE

The HNC is available as a 2-year course with one-day per week in college or as a full-time course over one year with two days a week in college.

The curriculum delivery takes place on a Monday for Year 1 HNC and Tuesday for Year 2 HNC. The HND delivery takes place on a Thursday for Year 1.

Our HND offer is a further 2-year top-up for those learners who successfully complete the HNC. The HND is currently available as one-day per week in college.

Both the HNC and HND currently are delivered on a Mechanical or Electrical pathway. Both pathways attend on the same day.

The intention is to offer a seamless progression route to a degree top-up from 2023.



COURSE FUNDING

The HNC can be funded by the individual or through student finance. Alternatively, the employer can pay the course fees direct or use Levy funding by registering their employee on the Level 4 'NVQ style' apprenticeship standards.

The HND is currently only available as self/SFE funded or direct employer funded. We are not running a Level 5 apprenticeship at this time. The cost of each year/day on the HNC or HND is £4000 (£8000 total for the HNC and HND.)

HNC STRUCTURE

Both courses are tailored to a career as an electrical or mechanical maintenance engineer so alongside the core skills required by all engineers, the focus (particularly as students' progress on to the HND) is on condition monitoring, predictive maintenance, test and measurement and design performance validation and prediction. The HNC course has mandatory units in Maths, Science, Design and Project.

The HNC Electrical pathway has units on Electrical Principles, Circuit Design, Fault Finding and Digital Principles, which includes Logic Programming. The HNC Mechanical pathway has units on Mechanical Principles, Thermodynamics, Materials Properties and Testing and Computer Aided Design and Manufacture.

HND STRUCTURE

At Kirklees College, we run both the HNC and HND as stand-alone qualifications. The HND requires successful completion of an HNC at Merit overall in order to enrol. The HNC qualification does not have to have been studied at Kirklees College.

The HND course has significant common content between the Mechanical and Electrical pathways as there is a substantial focus on the common skills related to monitoring of industrial systems. Both pathways have identical units in year one.

The HND course has common units in Maths, Research Project, Professional Management, Sustainability and Industrial Systems which includes a significant amount of content on sensors, data acquisition, data analysis and condition monitoring. Both pathways will study electrical and mechanical content.

The HND Electrical pathway includes units on Electrical Principles, Power and Storage.

The HND Mechanical pathway includes units on Mechanical Principles and Virtual Engineering, which covers Computational Fluid Dynamics and Finite Element Analysis.

The extensive HND Research Project is completed over two years, as it is twice the size of the other HND units. It is anticipated that much of the project may be completed on-site with employers.