

Training Pathways

Below is the course subject overview a HES employee works through a pathway to their career development.

BASELINE TRAINING MODULES	
Stage 1.0	Stage 2.0
M005 Contact Resistance Testing	M033 Basic Rotating Machines HV
M004 Insulation Resistance Testing	M030 Basic CT Testing and Theory
M011 Medium Voltage Circuit Breaker Maintenance	M031 Basic VT Testing and Theory
Stage 1.1	M020 Cable VLF Testing
M007 Basic Earthing	M028 Hi-Pot Withstand testing
M023 Basic Transformer Testing	M052 HV Cable Phasing
M010 LV Breaker Maintenance	M088 Basic Partial Discharge Theory
Stage 1.2	M012 Basic Online Partial Discharge
M044 Drawings and Fault Finding	M037 Primary Current Injection
M043 Panel Wiring Point to Point	M099 Oil Breakdown Testing
M068 Fall of Potential Earth testing	M002 Test Reports & Advanced Computer Skills
M035 Basic Transformer Oil Sampling	
ELECTIVE PATHWAYS	
Cables	Earthing
M046 HV Cable Term Products	M008 Step and Touch Earth Testing
M021 Cable Tan Delta Testing	M066 Earth Potential Rise Theory and Principles
M022 Basic Cable Fault Locating	M067 Soil Resistivity Theory and Principles
M111 Advanced Cable Fault Location	M080 Earth Lightning Protection
M102 Cable Spiking and Service ID	Leadership
M016 Offline Cable Part Discharge	M064 Supervisor Field Leadership
M029 Sheath Fault Service Location	M083 Leading Hand Field Leadership
M094 Basic HV Cable Jointing up to 33kV XLPE	Motors & Generators
M098 Advanced HV Cable Jointing up to 33kV XLPE	M042 Generators
M096 HV Jointing Up to 33kV Paper Lead	M106 Offline PD Rotating Machines
Circuit Breakers and Substations	Protection
M015 YSF6 Maintenance Services	M017 Basic Protection Testing
M014 Advanced HV Circuit Breaker Testing	M018 Intermediate Protection Testing
M013 Offline Partial Discharge 50HZ Equipment	M041 KWH Metering and PQM's
M104 Advanced Partial Discharge Theory	M026 Power Quality Harmonics
M112 PD Survey with Corona Camera	M110 Advanced Power Factor Correction
M070 Battery Testing	M065 Omicrons CMC Introduction
M027 SF6 Gas Handling & Testing	M038 Reclosure Maintenance Testing
M077 Advanced CT Theory & Testing	M109 Recloser Commissioning testing
M078 Advanced VT Theory & Testing	M100 Advanced Protection- Line Differential
Commissioning and Switchboards	M101 Advanced Protection- Generator
M040 RMU Commission Install	M105 IEC618650 Configuration and testing
M055 PLC Comms	Transformers
M039 Power Networks Substation Overview	M048 DLA Testing
M076 Panel Commissioning Function Checks	M024 Transformer Excitation Testing
General	M036 Transformer Oil Handling – Basic Repairs and Faults
M009 Thermographic Surveys & Reports	M081 Transformer Oil Handling -Advanced Repairs and Faults
M061 Comms and Data	M107 Transformer Oil Streamlining Theory
M006 Basic Construction Install works	M087 Oil Streamlining 6000L/Hr Mica Fluid Practical
M103 Advanced Construction Install Works	M108 Oil Streamlining 1000L/Hr Trojan Practical
M089 SCADA and Instruments	M090 Transformer Sweep Frequency (SFRA)