COURSE BROCHURE

Advanced CNC: 4-Axis & 5-Axis Concepts

Diploma, Vocational & Skills / CNC & Precision Manufacturing

One-time full-course fee

INR 3,999

Access

12 months course access

Study plan

18-24 suggested study hours; 12 months access

Learning format

Eight self-paced written lessons in English, original worked examples, paper or digital exercises, explained knowledge checks and a capstone with a model solution and self-assessment rubric. Automated Course Tutor support is available in the LMS.

Programme overview

Eight written foundation lessons in indexed versus simultaneous machining, coordinate transformations, swept envelopes, tool-axis geometry, kinematics, verification and timing, ending with a multi-face process-selection capstone. Includes original mathematical exercises; does not include machine operation, software licences, calibration procedures or practical qualification. Eight self-paced written lessons in English, original worked examples, paper or digital exercises, explained knowledge checks and a capstone with a model solution and self-assessment rubric. Automated Course Tutor support is available in the LMS. Online theory and planning only. Physical machine practice requires separate qualified supervision and machine-specific authorisation. No machine time, software or simulator licence, live instructor, recorded lecture series, individual human marking, employment guarantee, ITI/DGT/NSQF qualification or manufacturer accreditation is included. Programme examples are for offline interpretation or simulation and are not ready-to-run machine instructions. Advanced concepts, not proof of five-axis programming competence. Three-axis CAD/CAM knowledge is assumed; no machine or software option is supplied.

Who this is for

1. Confident 3-axis machining/CAM concepts and coordinate-system knowledge.
2. Use the supplied fictional parts and data. Do not upload confidential employer drawings. Use only software you are entitled to use; paper alternatives are available.

Published topics and learning focus

1. Choosing 3-axis, indexed and simultaneous machining
2. Reference frames and rotation calculations
3. Rotary workholding and swept envelopes
4. Tool-axis orientation, contact and reach
5. Kinematics, pivot data and control concepts
6. Verifying the whole multi-axis machine motion
7. Multi-axis timing, feed interpretation and programme review
8. Capstone: selecting and verifying a multi-face process

Before you choose

1. These are published programme highlights, not certification of complete syllabus coverage. Review the available reading index and programme trial before enrolling.
2. ZELVU provides learning support. It does not award the underlying degree, professional registration or an examination result.
3. Current checkout terms and refund policy apply. Payment and access require successful provider verification.

Take the next step

Explore the programme trial

View current details, scope and terms

Ask ZELVU about this programme

Save this brochure for reference. Details can change: confirm the current programme page and checkout before making a purchase.