



Faculty of Body Works



Curriculum with Course Syllabus

Department: CAR DETAILING

Semester 1-4 | Core Courses + ATA 2040 Electives + SIWES + Capstone with Course Codes (CDT 101-CDT 405)

CDT 101 – Workshop Safety & Car Care Tools

Credit Hours	2 (1T/1P)
Course Description	Safety in detailing workshops and handling of tools.
Syllabus / Topics	• PPE • Cleaning tools • Workshop layout
Practical Activities / Lab Work	• PPE drills • Tool setup • Cleaning protocols
Assessment Methods	CA 20% Practical 40% Exam 40%
Learning Outcomes	Apply workshop safety and tool handling.
Accreditation Mapping	NBTE NID Safety
AI/Future Module ↵	VR Workshop Safety

CDT 102 – Fundamentals of Vehicle Surfaces

Credit Hours	3 (2T/1P)
Course Description	Study of automotive surfaces: paint, glass, plastics, metals.
Syllabus / Topics	• Paint systems • Glass surfaces • Plastic & metal finishes
Practical Activities / Lab Work	• Inspect surfaces for defects
Assessment Methods	CA 20% Practical 40% Exam 40%
Learning Outcomes	Identify vehicle surface types and conditions.
Accreditation Mapping	NBTE NID ASE



AI/Future Module ↘

AI Surface Analyzer

CDT 103 – Washing & Cleaning Techniques

Credit Hours	3 (1T/2P)
Course Description	Car washing, clay barring, decontamination.
Syllabus / Topics	• Washing techniques • Clay bar • Decontamination
Practical Activities / Lab Work	• Multi-step wash on vehicles
Assessment Methods	CA 20% Practical 40% Exam 40%
Learning Outcomes	Apply effective washing and cleaning techniques.
Accreditation Mapping	NBTE NID IMI-UK
AI/Future Module ↘	AI Wash Cycle Optimizer

CDT 104 – Introduction to Polishing

Credit Hours	2 (1T/1P)
Course Description	Machine polishers, pads, compounds.
Syllabus / Topics	• Polishers • Pads • Compounds
Practical Activities / Lab Work	• Polish test panels with rotary/orbital machines
Assessment Methods	CA 20% Practical 40% Exam 40%
Learning Outcomes	Perform basic polishing operations.
Accreditation Mapping	NBTE NID ASE
AI/Future Module ↘	Smart Polishing Assistant

CDT E1 – VR Car Wash Training (ATA 2040 Elective)

Credit Hours	2 (0T/2P)
Course Description	Virtual training on car washing techniques.
Syllabus / Topics	• VR wash modules • Cleaning protocols
Practical Activities / Lab Work	• VR-based wash practice
Assessment Methods	Project 100%
Learning Outcomes	Demonstrate wash techniques in VR.
Accreditation Mapping	NBTE Elective IMI-UK
AI/Future Module ↘	VR Wash Simulator

CDT 201 – Advanced Polishing & Paint Correction

Credit Hours	3 (1T/2P)
Course Description	Removing swirls, scratches, oxidation.
Syllabus / Topics	• Defects • Correction methods • Polishing stages
Practical Activities / Lab Work	• Multi-stage paint correction



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Assessment Methods	CA 20% Practical 40% Exam 40%
Learning Outcomes	Perform advanced polishing and correction.
Accreditation Mapping	NBTE NID ASE
AI/Future Module ↘	AI Defect Mapping

CDT 202 – Paint Protection Systems

Credit Hours	2 (1T/1P)
Course Description	Waxes, sealants, ceramic coatings.
Syllabus / Topics	• Waxing • Sealants • Ceramic coatings
Practical Activities / Lab Work	• Apply paint protection systems
Assessment Methods	CA 20% Practical 40% Exam 40%
Learning Outcomes	Apply protection to vehicle surfaces.
Accreditation Mapping	NBTE NID IMI-UK
AI/Future Module ↘	Coating Durability Predictor

CDT 203 – Interior Detailing

Credit Hours	3 (1T/2P)
Course Description	Cleaning of upholstery, dashboards, electronics.
Syllabus / Topics	• Dashboard cleaning • Upholstery care • Electronics-safe methods
Practical Activities / Lab Work	• Full interior detailing
Assessment Methods	CA 20% Practical 40% Exam 40%
Learning Outcomes	Perform interior detailing.
Accreditation Mapping	NBTE NID ASE
AI/Future Module ↘	AI Interior Cleaning Assistant

CDT 204 – Glass & Trim Restoration

Credit Hours	2 (1T/1P)
Course Description	Restoration of headlights, glass, and trims.
Syllabus / Topics	• Glass polishing • Trim restoration • Headlight clarity
Practical Activities / Lab Work	• Restore faded trim and glass clarity
Assessment Methods	CA 20% Practical 40% Exam 40%
Learning Outcomes	Restore and protect glass and trims.
Accreditation Mapping	NBTE NID ASE
AI/Future Module ↘	AI Glass Clarity Tool

CDT E2 – AR Paint Protection (ATA 2040 Elective)

Credit Hours	2 (0T/2P)
Course Description	AR visualization of paint protection films



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	and coatings.
Syllabus / Topics	• AR tools • Paint protection demo
Practical Activities / Lab Work	• Create AR protection mockup
Assessment Methods	Project 100%
Learning Outcomes	Visualize protection systems with AR.
Accreditation Mapping	NBTE Elective IMI-UK
AI/Future Module ↘	AR Protection Planner

CDT 301 – SIWES Internship

Credit Hours	6 (0T/6P)
Course Description	Six-month supervised internship at detailing workshops.
Syllabus / Topics	• Weekly logbook • Supervisor evaluations
Practical Activities / Lab Work	• On-the-job training
Assessment Methods	Supervisor Report 50% Logbook 30% Oral 20%
Learning Outcomes	Apply detailing skills in industry.
Accreditation Mapping	NBTE SIWES ASE
AI/Future Module ↘	IoT Digital Internship Logbook

CDT 401 – Capstone Project

Credit Hours	6 (0T/6P)
Course Description	Independent project on detailing innovations.
Syllabus / Topics	• Proposal • Development • Defense
Practical Activities / Lab Work	• Execute detailing project
Assessment Methods	Project 50% Report 30% Defense 20%
Learning Outcomes	Execute and defend detailing project.
Accreditation Mapping	NBTE NID ASE
AI/Future Module ↘	AI Detailing Planner

CDT 402 – Luxury Detailing & Show Car Prep

Credit Hours	3 (1T/2P)
Course Description	Concours preparation and luxury detailing.
Syllabus / Topics	• Show car prep • Luxury detailing
Practical Activities / Lab Work	• Luxury detailing project
Assessment Methods	CA 20% Practical 40% Exam 40%
Learning Outcomes	Perform luxury detailing.
Accreditation Mapping	NBTE NID IMI-UK
AI/Future Module ↘	AI Luxury Detail Configurator

CDT 403 – Eco-Friendly Detailing

Credit Hours	2 (1T/1P)
Course Description	Waterless washes, biodegradable products.



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Syllabus / Topics	• Waterless wash • Biodegradable cleaners
Practical Activities / Lab Work	• Perform eco-detailing
Assessment Methods	CA 20% Project 40% Exam 40%
Learning Outcomes	Apply sustainable detailing practices.
Accreditation Mapping	NBTE NID IMI-UK
AI/Future Module ↘	AI Sustainability Checker

CDT 404 – Entrepreneurship in Car Detailing

Credit Hours	2 (1T/1P)
Course Description	Business planning and management for detailing services.
Syllabus / Topics	• Business setup • Marketing • Finance
Practical Activities / Lab Work	• Draft detailing business plan
Assessment Methods	CA 20% Business Plan 40% Exam 40%
Learning Outcomes	Develop a detailing business plan.
Accreditation Mapping	NBTE NID IMI-UK
AI/Future Module ↘	AI Business Plan Assistant

CDT 405 – Smart Detailing Tech (Elective)

Credit Hours	2 (0T/2P)
Course Description	IoT-enabled sensors and robotics in detailing.
Syllabus / Topics	• IoT sensors • Robotics • Automation
Practical Activities / Lab Work	• Simulate robotic detailing system
Assessment Methods	Project 100%
Learning Outcomes	Apply smart tech to detailing.
Accreditation Mapping	NBTE Elective IMI-UK
AI/Future Module ↘	Smart Detailing Robot Simulator