

LEVEL 6 ASSESSMENT SPECIFICATION

Student name:		Student ID number:	
Programme:			
Module:	Data Warehousing & Data Mining		
Module code:	ACCA6026	Contribution to Overall Module Assessment (%):	50%
Lecturer:	Dr Nouh Elmitwally	Internal Verifier:	Dr Sana Jokhio
Assignment Title:	Data Warehousing	Word count (or equivalent):	2500
Submission deadline:	27th March 2026 14:00 (2PM)	Return date of provisional marks & written feedback:	24th April 2026
Submission method:	All written assessments, where practical and possible, must be submitted via Turnitin unless otherwise instructed by the Lecturer. (Please DO NOT put this assessment specification into Turnitin or it will match many similarities with other students' submissions.) Alternative submission method (if applicable): Late submission of the assessment will result in a late penalty mark: Work which is submitted up to 1 week late will be capped at 40% for the first attempt and will be awarded a mark of 0% for re-assessment. Late submission penalties may be lifted only if there is an approved extenuating circumstances claim. Work submitted more than 1 week late will be considered as a non-submission and will not be marked. The work may be considered as a submission for reassessment if offered by an Examining Board or if there is an approved extenuating circumstances claim.		
Academic honesty / referencing:	Academic honesty is required. In the main body of your submission you must give credit to authors on whose research and ideas your work is based. Append to your submission a reference list that indicates the books, articles, etc. that you have used, cited or quoted in order to complete this assessment.		

Module Learning Outcomes (from module syllabus)

- **Analyse critically the structure, capabilities and role of a data warehouse within a modern business environment.**
- **Select and perform appropriate data analysis and reporting on data within a data warehouse environment and critically evaluate the results**
- Provide business intelligence through the creative application of appropriate data mining processes and the critical evaluation of their results.

A word on the use of ChatGPT and similar generative AI systems

As you work on your assignments, you may be considering using generative AI for background research. It is acceptable to use these tools as a resource, but it is important to be aware that they often make mistakes and may not be completely accurate, particularly when asked for references. You must remember that as a student **you** are ultimately responsible for anything you submit, and relying solely on generative AI could lead to your work getting a lower grade than you are capable of, or your work being investigated for academic malpractice. Copying and pasting text directly from these tools without proper citation or attribution is not only unethical but could also result in serious consequences such as failing the assignment or even being expelled from the university.

It is therefore crucial to use generative AI only as a starting point and then verify and fact-check any information you obtain. You should also ensure that any work you submit reflects your own understanding and originality, and that you properly reference any sources you use.

You may use these tools, but you must use them ethically, and you should always strive for academic honesty and integrity.

Use of Generative AI in Assessment

(Lecturer to indicate Yes or Not against each element)

RESEARCH	For this assessment, you can use Generative AI to support you in research and data analysis.	Yes ☒ No ☐
STRUCTURE	For this assessment, you can use Generative AI to support you in structuring your submission, including creating a draft argument structure, identifying parts and headings, etc.	Yes ☒ No ☐
PROOFREADING	For this assessment, you can use Generative AI to check your own text/creation for grammatical and syntactical mistakes, including getting suggestions to rephrase your work.	Yes ☒ No ☐
WRITING	For this assessment, you can use Generative AI to create text for submission.	Yes ☐ No ☒
CREATIVE	For this assessment, you can use Generative AI to create creative materials, such as images.	Yes ☐ No ☒
PROGRAMING	For this assessment, you can use Generative AI to create and check code.	Yes ☐ No ☒
NONE	For this assessment, you are not allowed to use any type of Generative AI support. This includes research support, structure support, writing/proofreading support and creative support.	☐

TASK DESCRIPTION

Case Study: DHL Supply Chain - Enhancing UK & European Logistics Efficiency with Data Analytics

Context:

DHL Supply Chain, a division of Deutsche Post DHL Group, is a global leader in contract logistics, providing

comprehensive warehousing, transportation, and value-added services. Operating across over 60 countries, DHL Supply Chain manages complex logistics for clients in sectors such as retail, automotive, life sciences & healthcare, technology, and consumer goods. The company is committed to innovation, including leveraging data and digitalization to optimise its operations and enhance customer service.

The Challenge:

DHL Supply Chain's extensive operations in the UK and across Europe involve a vast network of distribution centres, transport fleets, and diverse client contracts. While individual operational systems (e.g., Warehouse Management Systems, Transportation Management Systems, Order Management Systems) function effectively at a local level, a fragmented data landscape prevents a unified, real-time view of overall performance, particularly for cross-regional and multi-client logistics flows.

The UK leadership team, supported by their European counterparts, recognizes that this lack of integrated data insights is hindering their ability to:

- Identify bottlenecks and inefficiencies across their supply chains.
- Proactively manage inventory and optimise warehouse utilisation.
- Gain a consolidated view of client profitability and service level agreement (SLA) adherence.
- Make agile, data-driven decisions necessary for adapting to market shifts (e.g., Brexit impacts, e-commerce growth, sustainability initiatives).

You have been engaged as an external data warehousing consultant by DHL Supply Chain's UK & Ireland division. Your task is to develop a comprehensive report for the regional CEO and senior management team. This report should outline a strategic data warehousing solution that will consolidate data from their disparate operational systems across key UK and European sites. The goal is to provide actionable insights for optimizing logistics efficiency, improving client satisfaction, and supporting strategic growth.

Key UK and European Operational Hubs and Specializations:

To provide a concrete scenario, consider data originating from operations in the following locations:

- **Midlands (e.g., Daventry):** Major UK distribution hub, specializing in retail and e-commerce fulfilment, handling high volumes of inbound and outbound freight.
- **Greater London (e.g., Heathrow Logistics Park):** Focus on pharmaceutical distribution, high-value goods, and expedited air freight logistics.
- **Scotland (e.g., Eurocentral, Glasgow):** Manages industrial and manufacturing logistics, including just-in-time (JIT) deliveries for automotive clients.
- **Düsseldorf, Germany:** Primary European hub for automotive components and complex cross-border logistics into Eastern Europe.
- **Rotterdam, Netherlands:** Key gateway for ocean freight into Europe, specializing in chemical and bulk goods storage, and cross-docking operations.
- **Lyon, France:** Focuses on fresh produce and cold chain logistics for grocery retailers across Southern Europe.

Operational Data Landscape:

Every logistics event – from a parcel scan to a truck departure, a warehouse pick, or a customs clearance – generates critical data. Key data points include:

- **Shipment Data:** Unique shipment ID, origin/destination, carrier details, service type (e.g., express, standard), actual vs. planned transit times, weight, volume, number of packages, and associated freight costs.
- **Warehouse Data:** Item SKU, storage location (rack, bin), inventory levels, pick/pack times, put-away times, inbound/outbound dates, warehouse staff assigned, and space utilization metrics.
- **Order Data:** Client ID, order date, requested delivery date, actual delivery date, order value, discounts applied, special handling instructions, and order status.
- **Fleet & Transport Data:** Vehicle ID, driver ID, route details, fuel consumption, mileage, vehicle maintenance schedules, GPS tracking data (for real-time location and speed), and delivery confirmations.
- **Client Data:** Client ID, industry sector, contract terms (e.g., SLA, pricing agreements), historical order patterns, and customer service interactions.
- **Financial Data:** Invoicing details, payment terms, actual costs incurred (e.g., fuel, labor, customs duties), revenue generated per shipment/service, and profitability margins.

DHL Supply Chain Service Offerings and Complexity:

DHL Supply Chain offers tailored solutions, each with its own data characteristics:

- **Integrated Logistics Solutions:** Long-term contracts for large clients requiring end-to-end supply chain management (transport, warehousing, value-added services). These involve complex contractual pricing, volume-based discounts, and stringent KPIs.
- **Warehousing & Distribution:** Flexible storage, inventory management, pick-and-pack, and final mile delivery. Pricing is based on storage duration, volume, throughput, and specific handling requirements (e.g., cold storage, hazardous materials).
- **Transportation Management:** Management of client freight via various modes (road, air, ocean). Costs are influenced by lane, mode, volume, and urgency. "Premium Express" services (guaranteed delivery within tight windows) incur a significant surcharge.
- **Value-Added Services (VAS):** Customized services like kitting, labelling, quality control, returns processing, and pre-retail services. Priced per unit or per hour.
- **Green Logistics Initiatives:** Data related to carbon emissions per shipment, optimized route planning for fuel efficiency, and sustainable packaging solutions.

Operational Process Highlights:

1. **Order Ingestion:** Client orders are received and processed through a global Order Management System. The system automatically identifies the optimal warehouse(s) and transport modes based on inventory, capacity, and delivery requirements.
2. **Internal Transfers:** If goods need to be moved between DHL facilities (e.g., from Daventry to Heathrow for air freight), internal stock transfer orders are generated and tracked within the Warehouse Management Systems.
3. **Preparation & Dispatch:** Items are picked, packed, and loaded. Quality checks and pre-dispatch audits are recorded. Electronic Proof of Delivery (ePOD) systems capture successful deliveries and any exceptions.
4. **Returns Management:** Returned items are processed, inspected for damage, and their disposition (e.g., re-stock, scrap, repair) is recorded. Damages are assessed for client invoicing where applicable.
5. **Invoicing & Financial Settlement:** Invoices are generated based on service agreements, with complex rules for discounts, surcharges (e.g., for urgent requests, specialized handling), and fuel surcharges. Payment terms vary by client and contract.

6. **Continuous Improvement:** Data is continuously fed into systems to track performance against KPIs (e.g., on-time delivery, order accuracy, warehouse productivity). This data also informs asset management decisions, such as fleet upgrades or automation investments in warehouses.

Using the DHL Supply Chain case study provided, you are required to write a report that addresses the tasks outlined below. Your report should be appropriately referenced and include diagrams where necessary. Focus your answers on DHL's specific operational context rather than providing generalised responses.

This assignment assesses the **first and second learning outcomes**.

Task 1 (50% - 1250 words)

You are a data warehousing consultant engaged by DHL Supply Chain's UK & Ireland division. Your task is to produce a report for the CEO and board of directors, who are not computing specialists but have been advised that a data warehouse could significantly improve their logistics operations.

1.1: OLTP vs. Data Warehouse

Discuss the difference between an online transaction processing (OLTP) system and a data warehouse. DHL already uses OLTP systems (e.g., WMS, TMS, OMS), and the CEO needs to understand the benefits of investing in a data warehouse.

(10 marks – 250 words)

1.2: Data Warehouse Architecture & ETL

Explain, with diagrams, the architecture of a data warehouse and its source systems. Show how DHL's internal and external data sources (e.g., shipment, warehouse, fleet, financial data) can be integrated. Clarify the ETL process and reassure the CEO that this will not disrupt daily operations.

(15 marks – 375 words)

1.3: Data Marts for Management Decision-Making

The managing director, finance director, and sales & marketing director each require tailored insights. Explain how data marts can be designed to meet their specific needs using DHL's operational data.

(15 marks – 375 words)

1.4: OLTP Normalisation vs. Data Warehouse Dimensional Modelling

The IT director is familiar with OLTP systems but not data warehousing. Explain the difference between normalised OLTP structures and dimensional models used in data warehouses. Use a star schema diagram based on DHL's logistics data (e.g., shipments, inventory, routes) to illustrate facts and dimensions.

(10 marks – 250 words)

Task 2 (50% - 1250 words)

The CEO and board have approved the data warehouse initiative. You are now tasked with designing a suitable star schema and implementation plan for DHL's new data warehouse.

2.1: Source System Identification

Identify DHL's internal and external data sources that will feed into the data warehouse (e.g., OMS, WMS, TMS, financial systems, client portals). (5 marks – 125 words)

2.2: Star Schema Design

Design an appropriate star schema (or multiple stars) for DHL's data warehouse. Include tables for master data (e.g., clients, vehicles), metadata (e.g., service types), and aggregate data (e.g., monthly delivery performance). (20 marks – 500 words)

2.3: Data Marts and Schema

Identify relevant data marts (e.g., finance, operations, client services) and describe the schema and data each would contain to support departmental decision-making. (10 marks – 250 words)

2.4: ETL Plan

Provide a simplified ETL plan showing where data for each table will be sourced and what transformations (e.g., cleansing, aggregation, enrichment) are needed before loading into the warehouse. (10 marks – 125 words)

2.5: Data Quality & Governance

Discuss key data quality and governance considerations during ETL and ongoing warehouse operations (e.g., accuracy, consistency, compliance, access control). (5 marks – 75 words)

All design decisions should be explained and justified with reference to the literature. Suggested wordcounts for each section are given above.

GUIDANCE FOR STUDENTS IN THE COMPLETION OF TASKS

NOTE: The guidance offered below is linked to the five generic assessment criteria overleaf.

1. Engagement with Literature Skills

Your work must be informed and supported by scholarly material that is *relevant* to and *focused* on the task(s) set; you should make use of scholarly reviews and primary sources, where appropriate (for example, refereed research articles and/or original materials appropriate to the discipline). You should provide evidence that you have accessed a wide *range* of sources, which may be academic, governmental and industrial; these sources may include academic journal articles, textbooks, current news articles, organisational documents, and websites. You should consider the *credibility* of your sources; academic journals are normally highly credible sources while websites require careful consideration/selection and should be used sparingly. Any sources you use should be current and up-to-date, mostly published within the last five years or so, though seminal/important works in the field may be older. You must provide *evidence* of your research/own reading throughout your work, using a suitable referencing system, including in-text citations in the main body of your work and a reference list at the end of your work.

Guidance specific to this assessment: *You should be able to justify your design decisions with relevant references to the literature.*

2. Knowledge and Understanding Skills

At level 6, you should be able to demonstrate coherent and detailed knowledge and a systematic understanding of the subject area, at least some of which is informed by the latest research and/or advanced scholarship within the discipline. You should be aware of the uncertainty, ambiguity and limits of knowledge. Your work must demonstrate the growing extent of your knowledge and systematic understanding of concepts and underlying principles associated with the subject area. *Knowledge* relates to the facts, information and skills you have acquired through your learning. You demonstrate your *understanding* by interpreting the meaning of the facts and information (knowledge). This means that you need to select and include in your work the concepts, techniques, models, theories, etc. appropriate to the task(s) set. You should be able to explain the theories, concepts, etc. meaningfully to show your understanding. Your mark/grade will also depend upon the *extent* to which you demonstrate your knowledge and understanding; ideally each should be complete and detailed, with comprehensive coverage.

Guidance specific to this assessment: *Think about the data sources described in the case study and how these map to the elements of data warehouse structure and the ETL process. Try to identify the types of data that will be stored in each data source so that you can use it in targeted examples in your answer.*

3. Cognitive and Intellectual Skills

You should be able to: critically evaluate evidence, arguments, assumptions, abstract concepts and data some of which are at the forefront of a discipline (and that may be incomplete) to devise and sustain arguments, to make judgements and/or solve problems; describe and comment upon particular aspects of current research, or equivalent advanced scholarship, in the discipline. Your work must contain evidence of logical, analytical thinking, evaluation and synthesis. For example, to examine and break information down into parts, make inferences, compile, compare and contrast information. This means not just describing what! But also justifying: Why? How? When? Who? Where? At what cost? At all times, you must provide justification for your arguments and judgements. Evidence that you have reflected upon the ideas of others within the subject area is crucial to you providing a reasoned and informed debate within your work. Furthermore, you should provide evidence that you are able to make sound judgements and convincing arguments using data and concepts. Sound, valid conclusions are necessary and must be derived from the content of your work. Where relevant, alternative solutions and recommendations may be proposed.

Guidance specific to this assessment: *Remember to identify your source systems and your user groups, and use these to inform the design of your system.*

4. Practical Skills

At level 6, you should be able to apply the methods and techniques that you have learned to review, consolidate, extend and apply your knowledge and understanding, and to initiate and carry out projects. You will deploy accurately established techniques of analysis and enquiry relevant to the discipline, and apply them in complex and unpredictable contexts, to devise and sustain arguments and/or to solve problems. You should be able to frame appropriate questions to achieve a solution - or identify a range of solutions. You should be able to demonstrate how the subject-related concepts and ideas relate to real world situations and/or a particular context. How do they work in practice? You will deploy models, methods, techniques, and/or theories, in that context or circumstances, to assess current situations, perhaps to formulate plans or solutions to solve problems, or to create artefacts, some of which may be innovative and creative. This is

likely to involve, for instance, the use of real world artefacts, examples and cases, the application of a model within an organisation and/or benchmarking one theory or organisation against others based on stated criteria. You should show awareness of the limitations of concepts and theories when applied in particular contexts.

Guidance specific to this assessment: *As you're building a data warehouse remember that you should be using dimensional modelling and star schemas rather than a normalised database.*

5. Transferable Skills for Life and Professional Practice

Your work must provide evidence of the qualities and transferable skills necessary for graduate-level employment requiring the exercise of initiative and personal responsibility and decision-making in complex and unpredictable circumstances. This includes demonstrating: the learning ability for professional development to advance existing skills and acquire new competences of a professional nature that will enable you to assume significant responsibility within organisations; that you can initiate and complete tasks and procedures, whether individually and/or collaboratively; that you can use appropriate media to effectively communicate information, arguments and analysis in a variety of forms to specialist and non-specialist audiences; fluency of expression; clarity and effectiveness in presentation and organisation. Work should be coherent and well-structured in presentation and organisation.

Guidance specific to this assessment: *The report should be aimed at readers who understand database basics but do not have specific knowledge of data warehousing. Phrase your explanations accordingly.*

STUDENT FEEDBACK FORM

This section details the *extent* to which the assessment criteria are demonstrated by you, which in turn determines your mark. The marks available for each category of skill are shown. Lecturers will use the space provided to comment on the achievement of the task(s), including those areas in which you have performed well and areas that would benefit from development/improvement.

Generic Assessment Criteria	Marks available	Marks awarded
1. Engagement with Literature Skills		
Tasks 1.1 (10), 1.4 (10)	20	
2. Knowledge and Understanding Skills		
Tasks 1.2 (10), 1.3 (10),	20	
3. Cognitive and Intellectual Skills		
Tasks 2.5 (5) 2.1 (5)	10	
4. Practical Application Skills		
Tasks 2.2 (20), 2.3 (10), 2.4 (10)	40	
5. Transferable Skills for Life and Professional Practice		
Tasks 1.2 (5), 1.3 (5)	10	

Assessment Mark (Assessment marks are subject to ratification at the Exam Board. These comments and marks are to give feedback on module work and are for guidance only until they are confirmed.)	Late Submission Penalties (tick if appropriate)		%
	Up to 1 week late (40% Max)		
	Over 1 week late (0%)		

GENERIC ASSESSMENT CRITERIA

Level 6

In accordance with the Framework for Higher Education Qualifications, at the end of Level 6 students should have coherent and detailed knowledge and a systematic understanding of their subject area, at least some of which is informed by the latest research and/or advanced scholarship within the discipline. They will be able to accurately deploy established techniques of analysis and enquiry within a discipline, using their conceptual understanding to devise and sustain arguments and/or to solve problems. They should be aware of the uncertainty, ambiguity and limits of knowledge. They should be able to critically evaluate evidence, arguments, assumptions, abstract concepts and data (that may be incomplete), to make judgements, and to frame appropriate questions to achieve a solution - or identify a range of solutions. They will apply the methods and techniques that they have learned to review, consolidate, extend and apply their knowledge and understanding, and to initiate and carry out projects. They will have the ability to manage their own learning, and to make use of scholarly reviews and primary sources (for example, refereed research articles and/or original materials appropriate to the discipline). They will demonstrate the qualities and transferable skills necessary for employment requiring: the exercise of initiative and personal responsibility; decision-making in complex and unpredictable contexts; the learning ability needed to undertake appropriate further training of a professional or equivalent nature.

Level 6	FAIL	MARGINAL FAIL	SATISFACTORY (3 rd / Pass)	GOOD (2.2 / Pass)	VERY GOOD (2.1 / Merit)	EXCELLENT (1 st / Distinction)	EXCEPTIONAL (1 st / Distinction)
Category	0-29%	30-39%	40-49%	50-59%	60-69%	70-84%	85-100%
Engagement with literature (including reading, referencing, academic conventions and academic honesty)	Little or no evidence of reading and/or reliance on inappropriate sources. Views and findings mostly unsupported and non-authoritative. Referencing conventions used incoherently or largely absent.	Poor engagement with essential reading. No evidence of wider reading. Reliance on inappropriate sources, and/or indiscriminate use of sources. Heavily reliant on information gained through class contact. Inconsistent and weak use of referencing.	Engagement with a limited range of mostly relevant and credible sources. Some omissions and minor errors. Referencing conventions evident though not always applied accurately or consistently.	Engagement with an appropriate range of research-informed literature, including sources retrieved independently. Some over-reliance on texts. Referencing may show minor inaccuracies or inconsistencies.	Engagement with a wide range of research-informed literature, including sources retrieved independently. Selection of relevant and credible sources. Very good use of referencing, with no/very few inaccuracies or inconsistencies.	Engagement with an extensive range of relevant and credible literature, informed by the latest research. Consistently accurate application of referencing.	Exceptional engagement with an extensive range of relevant and credible literature, informed by the latest research. High-level referencing skills consistently and professionally applied.
Knowledge and understanding (Coherent and detailed)	Major gaps in knowledge and systematic understanding of the subject	Gaps in knowledge, with only superficial systematic understanding.	Limited knowledge and systematic understanding of the relevant	Knowledge is reasonably detailed, accurate with a good systematic	Knowledge is reasonably extensive coherent and detailed.	Excellent coherent and detailed knowledge and systematic	Exceptionally coherent and detailed knowledge and systematic

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Category	0-29%	30-39%	40-49%	50-59%	60-69%	70-84%	85-100%
knowledge and systematic understanding of the subject area, at least some of which is informed by the latest research and/or advanced scholarship within the discipline.)	matter. Substantial inaccuracies. No awareness of knowledge of the latest research and/or advanced scholarship within the discipline.	Some significant inaccuracies and/or irrelevant material. No awareness of knowledge of the latest research and/or advanced scholarship within the discipline.	concepts and principles within the subject area which to some limited extent, is informed by current research and scholarship.	understanding of the field of study and to some extent, current research and scholarship.	Exhibits very good understanding of the breadth and depth of established views, and the work is, at least in part, well-informed by current research and scholarship.	understanding of the principles and theories of current research and scholarship. Clear awareness of challenges to established views and the limitations of the knowledge base.	understanding of the principles and theories of the subject, well-informed by current research and scholarship. A critical, sophisticated and nuanced awareness of the ambiguities and limitations of knowledge.
Cognitive and intellectual skills (Conceptual and critical thinking, analysis, synthesis and evaluation of research, assumptions, abstract concepts and data (that may be incomplete); logic, argument and judgement.)	Wholly or almost wholly descriptive work. Little or no analysis, synthesis or evaluation. Failure to develop arguments, leading to illogical or invalid judgements. Unsubstantiated generalisations, made without use of any credible evidence.	Largely descriptive work, with superficial use of critical evaluation. Weak development of arguments and judgements. Information accepted uncritically, uses generalised statements made with scant evidence and unsubstantiated opinions. Ideas sometimes illogical and contradictory.	Limited attempt at critical thinking, analysis, synthesis and evaluation, tending towards description. Some evidence to support emerging arguments and judgements but these may be underdeveloped or with a little inconsistency / mis-interpretation. Asserts rather than argues a case.	Some critical thinking, analysis, synthesis and evaluation. Can analyse new and/or abstract concepts and data without guidance. An emerging awareness of different stances and ability to use evidence (that may be incomplete) to support the argument. Mostly valid arguments and logical judgements. Some tendency to assert/state opinion rather than argue on	Sound critical thinking, analysis, synthesis and evaluation demonstrating critical thinking. Ability to devise and sustain persuasive arguments, and to review the reliability, validity and significance of evidence (that may be incomplete) to make mostly appropriate and valid judgements.	Excellent critical thinking, analysis, synthesis and evaluation. Ability to investigate contradictory or incomplete information and make strong, persuasive, arguments and sophisticated judgements. Some evidence of independent thought and ability to 'see beyond the question', suggesting a grasp of the broader field and wider concepts.	Exceptional critical thinking, analysis, synthesis and evaluation based on judiciously selected evidence. Ability to investigate contradictory or incomplete information and make strong, persuasive, arguments and sophisticated, nuanced, judgements. Evidence of independent thought and ability to 'see beyond the question', suggesting an outstanding

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Category	0-29%	30-39%	40-49%	50-59%	60-69%	70-84%	85-100%
				the basis of reason and evidence.			grasp of the broader field and wider concepts.
Practical skills (Apply/deploy accurately established tools and techniques; initiate and carry out projects; formulate solutions to solve problems in complex and unpredictable contexts.)	Limited or no use of methods, materials, tools and/or techniques. Little or no appreciation of the context of the application. Limited understanding of the application of theory to practice or making appropriate links between the two. Very weak problem-solving skills in complex and unpredictable contexts.	Rudimentary application of methods, materials, tools and/or techniques but without consideration and competence. Flawed appreciation of the context of the application. Weak understanding of the application of theory to practice, with only occasional evidence of making appropriate links between the two. Weak problem-solving skills in complex and unpredictable contexts.	An adequate awareness and mostly appropriate application of well-established methods, materials, tools and/or techniques. Basic appreciation of the context of the application. Theoretical knowledge and understanding applied in practice, but not always making logical links between the two. Can identify problems and propose basic solutions in complex and unpredictable contexts without fully appreciating the complexity.	A good and appropriate application of standard methods, materials, tools and/or techniques. Clear appreciation of the context of the application. Mainly consistent, accurate and logical application of theory to practice, making appropriate links between the two. Can identify problems and propose mostly appropriate solutions in complex and unpredictable contexts.	A very good application of a range of methods, materials, tools and/or techniques. Very good consideration of the context of the application, with perceptive insights. Can identify problems and propose appropriate solutions in complex and unpredictable contexts. Evidence of some innovation and creativity.	An advanced application of a range of methods, materials, tools and/or techniques. The context of the application is well considered, and insightful. Application and deployment extend beyond established conventions. Can identify complex problems and propose excellent solutions. Innovation and creativity evident.	Exceptional levels of application and deployment skills in unpredictable, practical contexts, drawing skilfully on the latest research within the discipline. Can identify complex problems and propose sophisticated solutions. Assimilation and development of cutting edge processes and techniques.
Transferable skills for life and professional practice (Exercise of initiative and	Communication medium is inappropriate or misapplied. Work is poorly structured, disorganised	Communication medium is poorly designed and/or not suitable for the audience. Work is poorly presented in a	Can communicate in a suitable medium but with some room for improvement.	Can communicate effectively in a suitable format, but may have minor errors.	Can communicate well, confidently and consistently in a suitable format.	Can communicate professionally confidently and consistently in a suitable format.	Can communicate with an exceptionally high level of professionalism.

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Category	0-29%	30-39%	40-49%	50-59%	60-69%	70-84%	85-100%
personal responsibility; professional development; initiate and complete tasks and procedures: individually and/or collaboratively; use appropriate media to communicate effectively; fluency of expression; clarity and effectiveness in presentation and organisation.)	and/or confusingly expressed. Very weak use of language and/or very inappropriate style. Little or no evidence of autonomy (or collaboration, where relevant) in the completion of tasks. Little or no evidence of the skills required in graduate employment.	disjointed manner. It is loosely, and at times incoherently, structured, with information and ideas often poorly expressed. Weak use of language and/or inappropriate style. Weak independent initiative (or collaboration, if relevant). Limited evidence of the skills required in graduate employment.	Mostly ordered presentation and structure in which relevant ideas / concepts are reasonably expressed. Work may lack coherence in places. Can work as part of a team, but with limited involvement in group activities. Demonstrates the basic skills required in graduate employment, with some areas of minor weakness.	Mostly coherent, organised work, in a suitable structure and is for the most part clearly expressed. Can work effectively independently and/or as part of a team, with clear contribution to group activities. Demonstrates the skills required in graduate employment, with some areas of strength and some of minor weakness.	Work is coherent, fluent, well-structured and organised. Can work very well autonomously and/or as part of a team, with very good contribution to group activities. Demonstrates very good graduate employment skills, with just occasional minor weakness.	Work is coherent, very fluent and is presented professionally. Can work autonomously with initiative. Where relevant can work professionally within a team, showing leadership skills as appropriate, managing conflict and meeting obligations. Demonstrates excellent graduate employment skills and an appetite for further development.	Work is exceptionally coherent, very fluent and is presented professionally. Can work exceptionally well and professionally within a team, showing advanced leadership skills. Demonstrates exceptional graduate employment skills and an appetite for further development.