

### **ETW3482 Predictive Modelling Project Marking Rubric**

#### 1. Suitability of Objective, Problem, and Data Selection (10 marks)

Criteria	Poor	Needs Improvement	Satisfactory	Good	Excellent
Clarity of	0-1	>1-2	>2-3	>3-4	5
Objective	The objective is	The objective is	The objective is clear,	The objective is	The objective is
(5 marks)	unclear, vague, and	identified but not	with a basic	detailed, well-	exceptionally clear,
	not evidently	clearly articulated or	alignment to the	articulated, and	focused, and perfectly
	connected to a	well-aligned with the	business problem and	effectively aligns with	aligned with the data
	business problem or	business problem and	data context, and it	the business problem	and the business
	data, it can't be	data, and it might be	can be partly	and data, and it can	problem, and
	achieve by predictive	achieved by	achieved by	be achieved	predictive modelling
	modelling.	predictive modelling.	predictive modelling.	completely by	can achieve it
				predictive modelling.	completely and
					effectively.
Relevance of	0-1	>1-2	>2-3	>3-4	5
Problem and Data	The business problem	The business problem	The business problem	The business problem	The business problem
Appropriateness	is not identified or is	is mentioned but	is relevant, and a	is well-defined,	is clearly presented,
(5 marks)	poorly connected to	lacks a clear link to	basic connection	relevant, and shows a	demonstrating a deep
	the objective and	the objective and	between the	good connection to	understanding of its
	data.	data, with minimal	objective and data is	the objective and	complexities and
	The data selected is	relevance shown.	established.	data. Predictive	nuances. Predictive
	unsuitable, with no	The data selected has	Predictive modelling	modelling is shown to	modelling is shown to
	clear connection to	a weak connection to	is shown to be a	be an effective	be an essential and
	the business problem	the business problem	possible solution.	solution.	highly effective
	or objective.	and objective, with	The data selected is	The data selected is	solution.
		minimal suitability	appropriate, with a	highly suitable and	The data's
		shown.	basic level of	has a clear relevance	characteristics are
			suitability and	and strong	comprehensively
			relevance to the	justification for the	summarised to

	business problem and	business problem and	explain how they will
	objective.	objective.	support achieving the
			objective, and any
			limitations are
			addressed
			proactively.

# 2. Data Preprocessing Knowledge and Application (30 marks)

Criteria	Poor	Needs Improvement	Satisfactory	Good	Excellent
Technique	0-3	>3-6	>6-9	>9-12	>12-15
Application	Preprocessing	Preprocessing	Preprocessing	Preprocessing	Preprocessing
(15 marks)	techniques are	techniques are	techniques are	techniques are	techniques are
	inappropriately used	applied but with	applied correctly with	applied effectively,	applied expertly with
	or completely	limited understanding	a basic level of	showing good	an excellent
	omitted, showing no	and effectiveness.	understanding.	understanding and	understanding and
	understanding.			purpose.	justification,
					demonstrating
					mastery.
Data Integrity	0-3	>3-6	>6-9	>9-12	>12-15
(15 marks)	Data integrity is not	Data integrity is	Data integrity is	Data integrity is	The approach to
	considered, leading to	partially considered,	maintained with	effectively maintained	ensuring data
	potential	but methods used are	appropriate methods,	with methods that	integrity is exemplary,
	compromises in data	inadequate or	though the	are correctly applied	showcasing a
	quality.	incorrectly applied.	application could be	and show good	thorough
			improved.	understanding.	understanding of best
					practices. Clear

		evidence is provided that data quality has been enhanced
		without compromising its authenticity or the
		integrity of the analysis.

## 3. Predictive Modelling Knowledge and Application (35 marks)

Criteria	Poor	Needs Improvement	Satisfactory	Good	Excellent
Modelling and	0-4	>4-8	>8-12	>12-16	>16-20
hyperparameters	The model and	The model and	The model and	The model and	The selection of
Selection	hyperparameter	hyperparameter	hyperparameter	hyperparameter	models and
(20 marks)	selection are	selection show some	selection are	selection are well	hyperparameters is
	haphazard, and there	thought but lack a	appropriate, with a	thought out, with a	done with exceptional
	is no understanding	clear rationale and	basic rationale for the	clear rationale and a	insight, reflecting a
	or rationale for the	understanding of the	choices.	good understanding	deep understanding
	choices.	options.		of the model's	of the task. The
				hyperparameter	rationale for the
				strengths,	chosen model(s) and
				weaknesses and	hyperparameters is
				limitations.	compelling,
					demonstrating a
					sophisticated analysis
					of their strengths and
					limitations in the
					context of the specific
					business problem.

Technical	0-3	>3-6	>6-9	>9-12	>12-15
Proficiency	Technical skills are	Technical skills are	Technical skills are	Technical skills are	Exhibits outstanding
(15 marks)	lacking, and there are	developing but	adequate, resulting in	well-honed, leading	technical proficiency
	numerous errors in	insufficiently, leading	a satisfactory model	to a well-developed	with a nuanced and
	model development	to suboptimal model	development and	and tuned model.	expert model
	and parameter	development and	tuning.		development and
	tuning.	tuning.			tuning approach. The
					application of
					techniques and
					methodologies
					indicates a high level
					of competence and
					innovation.

### 4. Insightfulness of Analysis and Recommendations (10 marks)

Criteria	Poor	Needs Improvement	Satisfactory	Good	Excellent
Analytical Depth	0-1	>1-2	>2-3	>3-4	>4-5
(5 marks)	The analysis is superficial, offering no valuable insights or relevant recommendations.	The analysis provides limited insights, and recommendations are generic or not actionable.	The analysis is adequately insightful, with generally relevant and actionable recommendations.	The insightful analysis offers well-reasoned recommendations that show good potential for business impact.	The analysis demonstrates exceptional depth, with unique insights that offer clear added value. Recommendations are not only actionable but also demonstrate

					foresight and strategic thinking.
Business Relevance (5 marks)	0-1 Analysis and recommendations are irrelevant to the business context or problem.	>1-2 Some relevance to the business context is noted, but recommendations lack impact and feasibility.	>2-3 Analysis and recommendations are relevant to the business context with a satisfactory level of impact and feasibility.	>3-4 Analysis and recommendations are strongly relevant to the business context and offer good potential for impact and implementation.	strategic thinking.  >4-5 The opinions and suggestions show a profound understanding of the business context. They are highly practical, well-justified, and likely to result in significant
					business improvement.

# **5. Report Structure and Organisation (15 marks)**

Criteria	Poor	Needs Improvement	Satisfactory	Good	Excellent
Logical Flow	0-1	>1-2	>2-3	>3-4	>4-5
(5 marks)	The report is	The report shows an	The report has a	The report is well-	The report showcases
	disorganised with no	attempt at	logical flow that aids	organized, with a	an exemplary structure
	logical progression,	organisation but lacks	in understanding but	logical and intuitive	with a seamless flow
	making it difficult to	a clear and logical	could be more	flow that facilitates a	that enhances the
	understand.	progression.	intuitive and	good understanding	reader's understanding.
			cohesive.	of the content.	Transitions between
					sections are smooth,
					guiding the reader

					effortlessly through the narrative.
Comprehensiveness (5 marks)	0-1 The report is incomplete, missing key sections or critical information.	>1-2 The report includes most sections but lacks depth and detail in several areas.	>2-3 The report is complete, with all sections present and adequately addressed.	>3-4 The report is detailed and informative, covering all necessary sections with additional insights.	>4-5 Every section is complete and provides in-depth information that reveals a high level of understanding and analysis. The content goes beyond the basics to provide insightful perspectives on the project.
Formatting and Presentation (5 marks)	0-1 The report ignores formatting guidelines, with an unprofessional and disorganised presentation.	>1-2 The report follows some formatting guidelines but lacks consistency and professionalism in presentation.	>2-3 The report adheres to most formatting guidelines and presents information in an organised manner.	>3-4 The report is consistent with formatting guidelines and presents information clearly and professionally.	>4-5 The report presentation is of outstanding quality, meticulously adhering to formatting guidelines. It employs professional visual and textual elements to convey information effectively and engagingly.