

## Programme Specification for Postgraduate Programme Leading to: MSc in Artificial Intelligence Strategy

*Applicable for all postgraduate students starting on or after 1<sup>st</sup> January 2021*

Version No.	Date	Notes – Q&S USE ONLY	QA
1	November 2020	New programme for January 2021 start	BJR

Postgraduate Taught Programme	
1. Awarding institution	Brunel University London
2. Teaching institution(s)	Brunel University London
3. Home college/department/division	CBASS/ Brunel Business School
4. Contributing college/department/division/associated institution	CBASS: Brunel Business School, Brunel Law School CEDPS: Computer Science CHLS: Life Sciences / Environmental Sciences
5. Programme accredited by	N/A
6. Final award(s) and FHEQ Level of Award	MSc Artificial Intelligence Strategy FHEQ Level 7
7. Programme title	MSc Artificial Intelligence Strategy
8. Programme type (Single honours /joint)	N/A
9. Normal length of programme (in months) for each mode of study	September Starters 12 Months; January Starters 15 Months
10. Maximum period of registration for each mode of study	Normal Length of programme (as defined in 9 above) + 2 years
11. Variation(s) to September start	Two entry points, September and January, for Standard FHEQ Level 7 entry.
12. Modes of study	FT
13. Modes of delivery	Standard
14. Intermediate awards and titles and FHEQ Level of Award	Postgraduate Diploma in Artificial Intelligence Strategy (FHEQ Level 7) Postgraduate Certificate in Artificial Intelligence Strategy (FHEQ Level 7)
15. UCAS Code	
16. HECOS Code	100089
17. Route Code	1E49PARINSTR
18. Relevant subject benchmark statements and other external and internal reference points used to inform programme design	<a href="#">UK Quality Code for Higher Education Most Recent QAA Subject Benchmark Statement</a> - Business and Management <a href="#">Brunel 2030</a> Brunel Placement Learning Policy, as published under the 'Placements' section of the ' <a href="#">Managing Higher Education Provision with Others</a> ' page
19. Admission Requirements	Details of <a href="#">entry requirements</a> are provided on the University's and College website. <a href="#">Course specific entry criteria</a> are given on the course pages. Levels of English for non-native speakers are outlined on Brunel International's <a href="#">language requirements</a> pages.
20. Other relevant information (e.g. study abroad, additional information on placements)	The placement is not guaranteed. Students who could not secure a placement by end of May the following year after they started their course, will be reverted to the full time programme. The deadline applies to both September and January starters.

21. Programme regulations not specified in Senate Regulation 3. Any departure from regulations specified in Senate Regulation 3 must be stated here and approved by Senate.	N/A
22. Further information about the programme is available from the College website.	

### 23. EDUCATIONAL AIMS OF THE PROGRAMME

This MSc Artificial Intelligence Strategy programme prepares its graduates for successful careers as non-technical pro-active leaders in Artificial Intelligence. In support of the Business School's Mission, this programme develops systematic understanding of the Artificial Intelligence domain, and provides students with practical real world challenges, professional and research skills needed to analyse the application, regulatory and management aspects of AI in global organisational contexts.

The programme's interdisciplinary content covers implications, applications, limitations and opportunities of Artificial Intelligence in various private, public and third sectors. Students learn to determine when to pursue new, frontier technologies and consider options for how to implement them for organisational and wider societal benefits. Students develop the expertise to plan, design and implement appropriate and ethical AI solutions in practical scenarios, with a focus on socially responsible and sustainable business practices of artificial intelligence and learn to prepare for future challenges of AI. On a technical level the programme will provide students with fundamental understanding of the AI technologies life cycle from technical problem formulation, data gathering and processing using various machine learning methods, building of minimum viable products, new knowledge extraction, and metrics evaluation.

#### Programme Learning Goals

By the end of the programme students will:

- Become creative, curious, and pro-active leaders.
- Take on real world challenges by applying critical thought.
- Enact socially responsible and sustainable global business practices.
- Become global citizens with a respect for and understanding of diversity.
- Think strategically about innovative AI solutions that are ethical, humane and sustainable

### 24. PROGRAMME AND INTERMEDIATE LEARNING OUTCOMES

FHEQ Level		Learning Outcome	Masters Award Only	Associated Assessment Blocks Code(s)	Associated Study Blocks Code(s)	Associated Modular Blocks Code(s)

		Demonstrate a systematic understanding of the state of the art in AI at societal, organisational and individual levels		MG5804 MG5807	<ul style="list-style-type: none"> <li>• MG5705</li> <li>• MG5707</li> <li>• MG5708</li> </ul>	MG5630
		Evidence a critical awareness of the challenges and opportunities in the interplay between strategic and ethical choices and AI		MG5806 MG5807	<ul style="list-style-type: none"> <li>• MG5704</li> <li>• MG5705</li> <li>• MG5706</li> <li>• MG5708</li> </ul>	MG5629 MG5630
		Critically evaluate and suggest original application or modification of ways of implementing AI solutions from different perspectives (e.g. strategy / policies / philosophies / etc) in different contexts (industries, sectors, organisations etc)		MG5804 MG5805	<ul style="list-style-type: none"> <li>• MG5704</li> <li>• MG5705</li> <li>• MG5706</li> <li>• MG5707</li> </ul>	MG5629 MG5630
		Design solutions that reflect the complexities of AI in practice (e.g. ethical, legal, regulatory, cultural, social responsibilities, environmental etc)		MG5805 MG5806 MG5807	<ul style="list-style-type: none"> <li>• MG5704</li> <li>• MG5705</li> <li>• MG5706</li> <li>• MG5707</li> </ul>	MG5630
		Critically analyse the potential consequences of AI technologies on organisational characteristics (exemplified by structure, culture, processes etc) and the desirability of proposed future AI scenarios		MG5806 MG5807	<ul style="list-style-type: none"> <li>• MG5704</li> <li>• MG5705</li> <li>• MG5706</li> </ul>	MG5630
		Assess critically and utilise a range of methodologies that can be used to develop and interpret AI options in a range domains (e.g. social, scientific, regulatory etc.)		MG5804 MG5805 MG5806	<ul style="list-style-type: none"> <li>• MG5706</li> <li>• MG5707</li> <li>• MG5708</li> </ul>	MG5629 MG5630
		Implement a significant programme of research related to the problems and challenges of AI Strategies at societal, organisational and individual levels			<ul style="list-style-type: none"> <li>• MG5630</li> </ul>	MG5630
		Clearly communicate complex material and conclusions in oral and/or written forms.		MG5804 MG5805 MG5806 MG5807	<ul style="list-style-type: none"> <li>• MG5704</li> <li>• MG5705</li> <li>• MG5706</li> <li>• MG5707</li> <li>• MG5708</li> </ul>	MG5629 MG5630

**Learning/teaching strategies and methods** to enable learning outcomes to be achieved, including formative assessments

The College of Business, Arts and Social Sciences has developed a highly progressive Learning and Teaching Strategy. This programme directly supports and draws upon three elements of the strategy. One, it encourages students to become reflexive practitioners who critically discern decisions being taken by organisations when implementing AI. Two, it makes social inclusion and justice an integral part of the programme, ensuring students understand the effects of AI technologies such as disempowering individuals and sections of society who are digitally excluded and encouraging students to enquire and explore ways of overcoming the 'dark side' of AI. The programme has, from its inception, been designed to be interdisciplinary. This programme has contributions from Brunel experts and external practitioners from a range of subject areas including but not limited to transformation, strategy, regulations, intellectual property, machine learning, marketing, ethics, behaviours, value chains and sustainability.

The programme has been constructed by experts with a passion for their subject areas and who feel deeply about the effects of AI on society, organisations and individuals. Rather than any one discipline teaching an entire study block, each study block will be delivered by different disciplines. We believe it's important that students understand that implementing AI cannot be put into neat compartments; instead, AI practitioners are faced with a 'messy' set of contradictory issues. As each discipline has its own interpretation of AI and many of the subjects covered during the programme, students will be encouraged to interpret and construct their own meaning about the implementation of AI, its positive and negative consequences. We want students to become aware of their own ethical boundaries and their leadership and management qualities; to understand the importance of legal frameworks and their limitations, to grasp that AI strategies have ethical and behavioural consequences and that AI technologies are value-laden and not neutral objects.

The programme has been designed for dual delivery to support the university and college requirement to address the possibility of further lockdowns and physical restrictions due to Covid-19.

**Summative assessment strategies and methods** to enable learning outcomes to be demonstrated.

The MSc in AI Strategy has an assessment, study and modular block structure. In keeping with the interdisciplinary values of the programme, the assessment blocks will ensure the students are set assignments that enable them to integrate their learning and to demonstrate they have a firm grasp of disciplinary knowledge and understand the interplay between knowledge domains.

The programme team want the assessments to be authentic. This means moving away from regurgitating information acquired from readings and lectures. Instead, we want summative assessments to reflect the challenges that students will face in the workplaces of the future. Moreover, students need to demonstrate their individual abilities as well as their communication, teamwork and awareness of others through group and team-based learning. The assignments will be challenge-led and applied to 'real world' issues.

The assessment blocks are designed to enable more than one learning outcome to be assessed. In this way, students can optimise their performance on the programme. The assessment blocks have been outlined at a high level and specific activities will be provided to students each year.

**Group Assessment** – Group assignments will interdisciplinary assessments. The combination of disciplines that will conjoin to create the assessment will vary per cohort so that students can be assured that their learning is at the leading edge of practice. An individual assessment will be built into the group assessment e.g. a reflective paper or a 'mini-viva'. There will also be subject specific assessments for which each student will have to produce their own outcome to develop and demonstrate their individual learning abilities.

**Individual Assessment** – There will be two individual assignments each term. These assignments will be associated with the study blocks covered in the term. Due to the rapid developments in the fields of Artificial Intelligence Strategy and the topics covered in this programme, the format of individual assignments will vary over time so that assessments are authentic and relevant to industries demands. Examples of individual assignment formats may be individual essays based upon a critique of academic literature; individual video presentations; case study analysis; or critical reflections on industry practice.

**MG5629** - is an innovative and practice-led feature of the programme. MG5629 requires students to learn actively by applying themselves each term to address a major AI related challenge faced by organisations in the public, private or third sector. MG5629 will evolve each year as the challenges that AI throws up change. Students will work in groups to identify and make the case for their holistic AI 'solutions' to address these challenges. An individual assessment will be built into the group assessment e.g. a reflective paper or a 'mini-viva'.

**MG5630** – this is a major piece of independent research that will involve data collection and synthesis with state-of-the-art literature. The MG5630 will enable students to focus their studies on sectors and issues that they may want to pursue in future careers.

## 25. Programme Structure, progression and award requirements

Programme structures and features: levels, assessment blocks, credit and progression and award requirements. The following table shows the overall programme structure for both September and January intakes (subject to scheduling constraints).

Teaching Terms	January intake		September intake
<i>Term 2 (Spring)</i>	Study Blocks: <ul style="list-style-type: none"> <li>MG5704</li> <li>MG5705</li> <li>MG5706</li> </ul>	MG5630 Modular Block (across the full year)	Study Blocks: <ul style="list-style-type: none"> <li>MG5707</li> <li>MG5708</li> </ul>
<i>January - April</i>	<ul style="list-style-type: none"> <li>MG5629</li> <li>MG5806</li> <li>MG5807</li> </ul>		<ul style="list-style-type: none"> <li>MG5629</li> <li>MG5804</li> <li>MG5805</li> </ul>
<i>Term 1 (Autumn)</i>	Study Blocks: <ul style="list-style-type: none"> <li>MG5707</li> <li>MG5708</li> </ul>		Study Blocks: <ul style="list-style-type: none"> <li>MG5704</li> <li>MG5705</li> <li>MG5706</li> </ul>
<i>October – December</i>	<ul style="list-style-type: none"> <li>MG5629</li> <li>MG5804</li> <li>MG5805</li> </ul>		<ul style="list-style-type: none"> <li>MG5629</li> <li>MG5806</li> </ul>

- **Compulsory block:** All study blocks are compulsory.
- **Optional block:** There are no optional blocks in this programme.
- **Core Modular Block:** The MG5630

**Pre-Masters**

N/A

**FHEQ Level 7**

**Compulsory Assessment Block Codes, titles and credit**

**Artificial Intelligence MG5804 Term 1:** 20 credits. This consists of:

- Group Project – case study analysis (80%)
- Poster / Presentation (20%)

It will be associated with the topics related to the TWO study blocks covered in Term 1.

**Artificial Intelligence MG5805 Term 1:** 20 credits. This consists of:

- Individual Assessments (100% each)

The individual assignments will be associated with the topics related to the TWO study blocks covered in Term 1.

**Artificial Intelligence MG5806 Term 2:** 30 credits. This consists of:

- Group Project – case study analysis (80%)
- Poster / Presentation (20%)

It will be associated with the topics related to the Three study blocks covered in Term 2.

**Artificial Intelligence MG5807 Term 2:** 30 credits. This consists of:

- Individual Assessments (100% each)

The individual assignment will be associated with the topics related to the THREE study blocks covered in Term 2.

**Optional Assessment Block Codes, titles and credits**

N/A

**Compulsory study block codes, titles and credit volume**

1. MG5704
2. MG5705
3. MG5706
4. MG5707
5. MG5708

**Optional Study block codes, titles and credit volume**

N/A

**Compulsory modular block codes, titles and credits**

MG5629 (20 credits)

**Core Block:** MG5630 (60 credits)

**FHEQ Level 7 Progression and Award Requirements**

As per [Senate Regulation 3](#)

Please note: this specification provides a concise summary of the main features of the programme and the learning outcomes that a student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are

provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods can be found in the modular block, assessment and study block outlines and other programme and block information. The accuracy of the information contained in this document is reviewed by the University from time to time and whenever a modification occurs.