**DigitalMetal Studentship Application for 2025 Intake**

**Guidance to applicants**

***This form must be submitted along with your CV and via online application portal***

**Incomplete applications will not be considered.**

**The form has three sections – Personal details, Experience & Motivation, and Project Details.**

**Personal details**

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| **Forename** |  |
| **Surname** |  |
| **Email address** |  |
|  | Please indicate which category applies to you:  **Home Student:  International Student:**  To be classed as a **home** student, candidates must meet the following criteria:  • Be a UK National, or;  • Have settled status, or;  • Have pre-settled status, or;  • Have indefinite leave to remain or enter.  If a candidate does not meet the criteria above, they would be classed as an *International* student.  This will not apply to Irish nationals living in the UK and Ireland whose right to study and to access benefits and services will be preserved on a reciprocal basis for UK and Irish nationals under the Common Travel Area arrangement.  **For international applicants**:  UKRI allows international students to be eligible for studentships but only for a maximum of 30% of the cohort. Please consider **the potential gap** between the home and international fee rate and contact via email: digitalmetal-cdt@leicester.ac.uk to discuss any support the hosting University may offer you (e.g., an international fee waiver if available, or self-funded difference). |

**Your Experience and Motivation**

**Q1. Bachelors-level degrees awarded and grade/classification**

For 4-year integrated masters (MSci, MEng etc.) please report your *third* year mark here and the final “M” grade in Q2 (as detailed below).

Where a final grade is not yet known, please provide a predicted grade justified from your academic transcript. Please ensure that your academic referee is aware that they should also provide a predicted grade in their reference letter.

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| **Start date** | **End date** | **University** | **Subject** | **Degree awarded**  **(e.g., BSc)** | **Grade awarded (if available)** |
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**Q2. Masters-Level degrees and grade/classification or equivalent experience**

Where a final grade is not yet known, please provide a predicted grade justified from your academic transcript or indicate whether only a pass/fail is awarded. Please ensure that your academic referee is aware that they should also provide a predicted grade in their reference letter.

If you gained your MSc (or are working towards one) at a non-UK institution, please check the international student webpages at the host institution for your project for guidance on the UK equivalent of your grades.

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| **Start date** | **End date** | **University** | **Subject** | **Qualification awarded or predicted (e.g., MSc, MSci, etc.)** | **Grade awarded or predicted** |
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| **Q3. Relevant Professional Experience**  Do you have any professional experience beyond academia of research, applied research, or work in disciplines relevant to Manufacturing, Materials Engineering, Metallurgy, AI, Data Sciences for Engineering). Describe the role(s) and relevance in **up to 200 words**. |
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| **Q4. Why do you want to do a PhD?**  A PhD is a 4-year commitment that requires high personal motivation. Please explain in **up to 150 words** how doing a PhD will lead to your chosen career. Why are you interested in research? How did you develop that interest? |
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| **Q5.**  **How do you plan and manage tasks and time during longer-term projects?**  Good project and time management skills are key to the successful completion of a PhD, so here is the opportunity to show us how you approach planning and carrying out projects. In **up to 150 words** please describe how you plan tasks and manage your time using evidence from your academic, work or life experience. |
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| **Q6. What strategies do you use to solve problems?**  Experience shows that you will have to solve many problems during your PhD research, so tell us how you approach problem solving. In **up to 150 words** please describe a problem you have had to solve during your studies, at work, at home or elsewhere. Please describe how you solved the problem and how you might respond differently if you were faced with that problem again. |
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**Q7 Research Themes:** DigitalMetal CDT offer PhD research in the following 5 research themes in collaboration with world-leading industrial partners, including Rolls-Royce, UKAEA, GKN Aerospace, TWI, MTC, AWE, WMG, Siemens, Qinetiq, Tata Steel, British Steel, HVM Catapult and etc.

* **(1) Advanced manufacturing**. Example projects: (i) casting, (ii) welding, (iii) surface engineering, (iv) near net-shape forming, and (v) additive manufacturing
* **(2) Metals and alloys engineering.** Example projects: (i) development of Ni-base superalloys, (ii) development of high-performance alloys
* **(3) Multi-objective digital twinning of manufacturing processes**: Example projects: Digital twining of (i) casting, (ii) welding or (iii)additive manufacturing high performance engineering structures for aerospace, energy and medical applications, (iv) digital twinning of steelmaking processes
* **(4) Digital-enabled right-first-time manufacturing**. Example projects: (i) digital manufacturing of lightweight & multi-functional space structures, (ii) right-first-time manufacturing for environmental sustainability and net zero in metal manufacturing
* **(5) Engineering management and manufacturing supply chain study using digital tools**. Example projects: (i) use of Industry 4.0 to enhance decision making, (ii) supply chain co-ordination for sustainability, (iii) use of technology for supply chain visibility

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| **Your preferred Research Theme and example project**  (Select from the above) |  |
| **Preferred Host institution**  (Leicester, Birmingham, Loughborough, Nottingham, or Warwick) |  |

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| **Q8. What interests you about this theme in particular?**  Interest in a theme will significantly underpin your motivation during your studies. Please provide **up to 150 words** to explain/describe the key aspects or points that drew you to apply for this project. |
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| **Q9. What theme-specific skills and experience do you bring to this particular PhD project?**  In up to **200** words please tell us how your skills fit with this PhD. You can use examples from a wide variety of life experience including work, academic study, research, presentations or public engagement activities, wider reading, extra-curricular activities such as sports, volunteering or other community activities etc. |
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| **Q10. Is there anything else you’d like to tell us about that helps us understand a bit more about you?** For example, you could tell us about any extra-curricular activities such as sports, arts, or other clubs; volunteering; outreach; any grants or prizes you have been awarded; any other skills learned during internships or work placements etc. |
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