

The Alan Reece Building

# A new home for the IfM





## A new home for the IfM

The Institute for Manufacturing's new home is nearing completion on the university's West Cambridge Site. The Alan Reece Building will form a centre of research excellence and a hub for academic-industry interaction, to support the rapid conversion of ideas and opportunities into products and services. The building is due to open in 2009 and has been made possible by generous donations from the Gatsby Charitable Foundation and the Alan Reece Foundation.

### The IfM's approach

The IfM represents a radical departure from traditional, discipline-based organisations. It combines expertise in engineering, management and economics and brings together industry, academics and policy makers to foster an integrated approach, essential to meet the challenges facing industry today. Its three main strands of activity are:

- **Education** – involving undergraduate, post-graduate and post-experience students in integrated approaches to technology, design, management and business
- **Research** – understanding the changing nature of manufacturing firms, developing new production technologies and creating new managerial approaches
- **Practice** – working with companies to develop new products, processes and business models

### The context

The IfM was conceived to provide a multi-disciplinary academic/industrial environment appropriate to the needs of modern manufacturing. Its research structure is built upon a series of Centres, based on themes reflecting the fundamentals of manufacturing, from production processes to government policy. An Industry Links Unit is integral to the Institute and provides seamless engagement with industry, allowing the rapid flow of ideas and opportunities between industry and university.

During its first ten years the IfM has realised many of its founding aspirations, offering leadership and expertise to an international network of partners and collaborators. It provides a global focus for industrial education and innovation, creating new approaches to the challenges facing companies, industries and nations, and nurturing the leaders needed to succeed in the modern world. Its uniquely integrated approach supports its perception of manufacturing as the complete cycle from understanding markets through design and production, to distribution and service.



*"The IfM combines intellectual rigour with real-world relevance, as a uniquely integrated community of academics, students and industrialists with a shared passion for modern manufacturing."*

**Professor Mike Gregory**  
Head of the IfM

The IfM comprises:

- 7 key research centres
- 5 inter-disciplinary research programmes
- 240 faculty and researchers, including Industrial Fellows
- 180 Masters students a year
- academic and industrial collaboration in 36 countries
- 150 student projects a year

The IfM's greatest area of expansion has been in the provision of industrial services, driven by corporate sector demand.

Each year around 1,000 industry participants attend its courses and events. It has built Knowledge Transfer Partnerships and projects with 73 international companies. They all benefit from the Department of Engineering's 5\* status in the last research assessment exercise.

The IfM works closely with 170 multinationals, with a combined turnover of £70 billion.



Building upon the expertise of its research centres the IfM is establishing a number of interdisciplinary research programmes which address the needs of modern manufacturing while retaining strong links with their underlying disciplines. These include:

- Services engineering and management
- Design and innovation
- Global industrial structures
- Emerging industries
- Industrial sustainability

### **The Alan Reece Building**

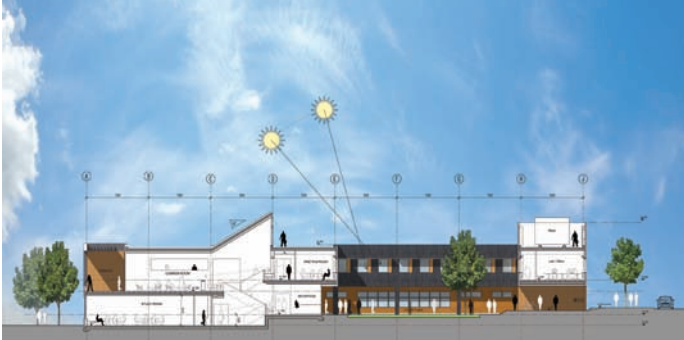
The IfM's new home on the university's West Cambridge Site will include:

- state-of-the-art teaching facilities to attract and accommodate excellent undergraduate, post graduate and post-experience students
- an Industrial Design and Innovation Studio to support commercial product design and education
- modern facilities for research into the design and operation of global industrial businesses and emerging high technology companies
- an Industrial Systems Workshop to support strategic planning, product design, process design and business development
- state of the art equipment for technology research including industrial laser systems, inkjet and RFID applications

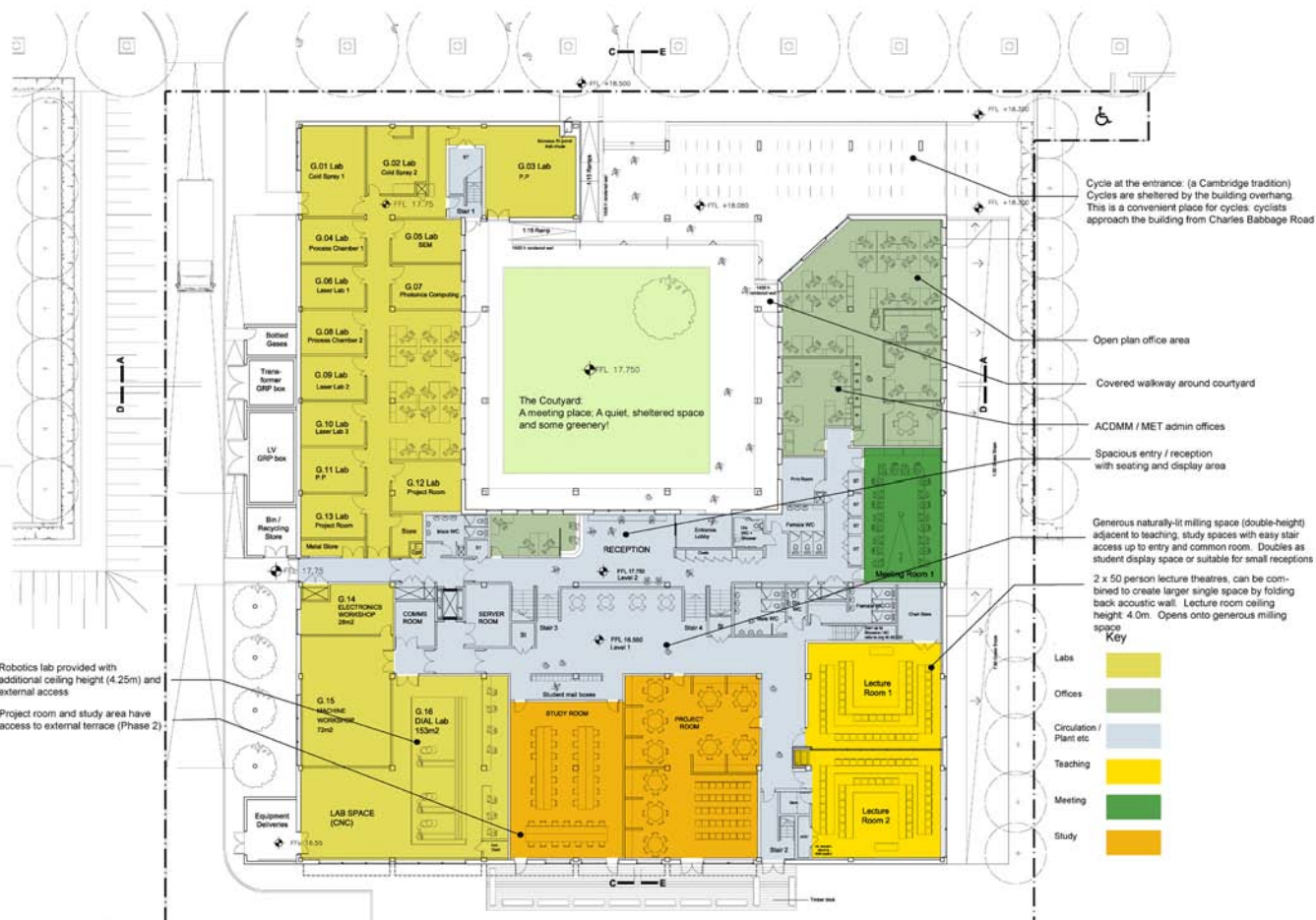
The following pages provide an introduction to the building and its activities.



*The building is designed to promote interaction between academics, industrialists and students. The sheltered entrance courtyard, modelled on those of the Cambridge colleges, will provide a pleasant, dynamic meeting place.*



*The design takes advantage of a sloping site to provide well-proportioned social and working spaces on four levels, which are all readily accessible from the atrium and core circulation space.*



Robotics lab provided with additional ceiling height (4.25m) and external access

Project room and study area have access to external terrace (Phase 2)

Cycle at the entrance (a Cambridge tradition)  
Cycles are sheltered by the building overhang.  
This is a convenient place for cycles, cyclists approach the building from Charles Babbage Road

Open plan office area

Covered walkway around courtyard

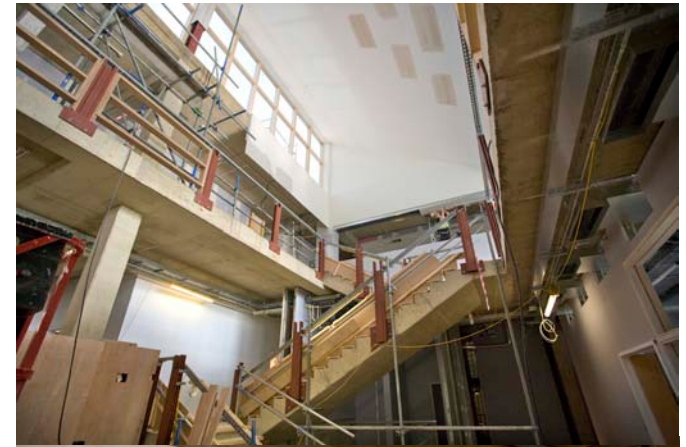
ACDMM / MET admin offices

Spacious entry / reception with seating and display area

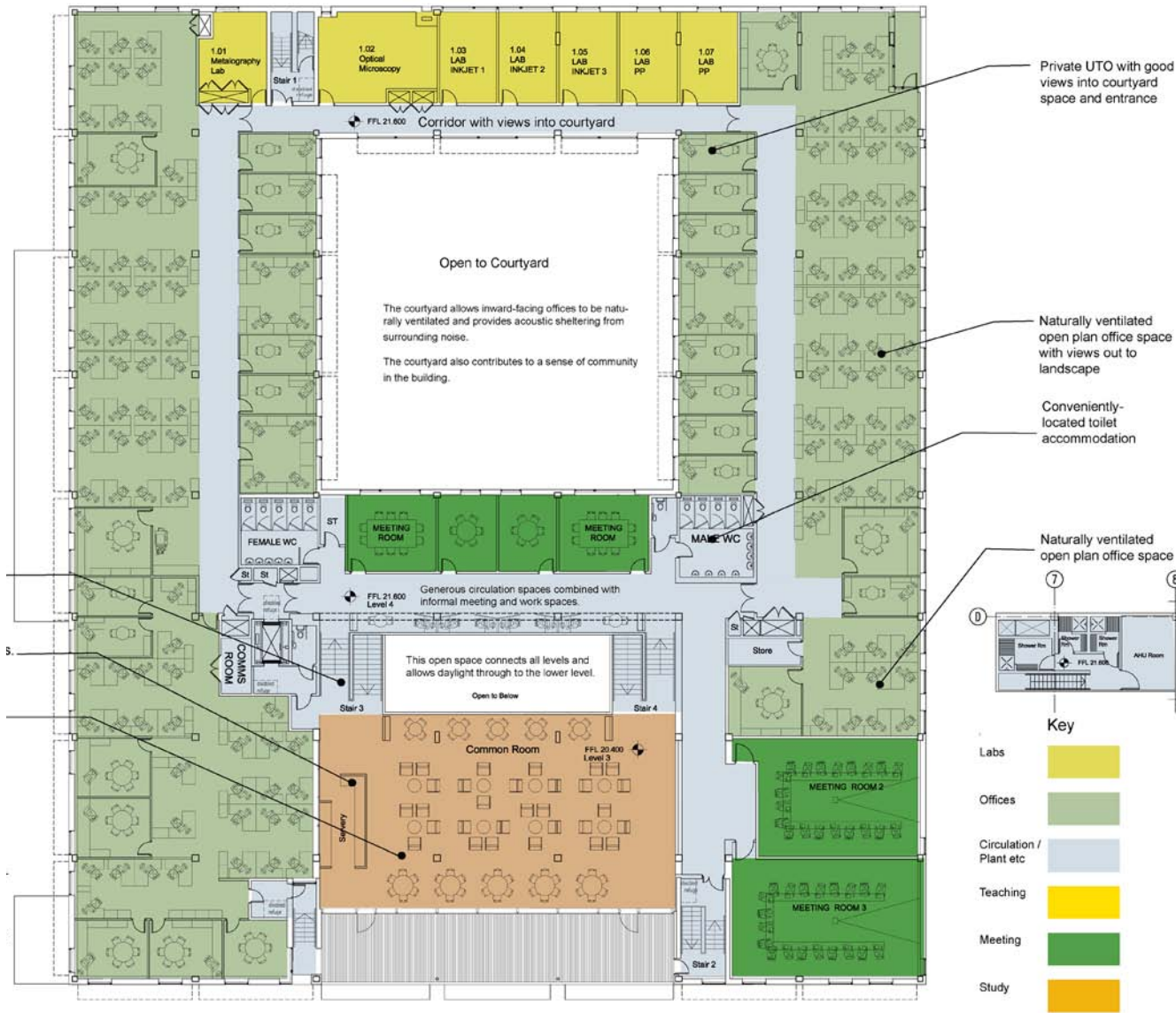
Generous naturally-lit miling space (double-height) adjacent to teaching, study spaces with easy stair access up to entry and common room. Doubles as student display space or suitable for small receptions

2 x 50 person lecture theatres. can be combined to create larger single space by folding back acoustic wall. Lecture room ceiling height: 4.0m. Opens onto generous miling space

- Key
- Labs
  - Offices
  - Circulation / Plant etc
  - Teaching
  - Meeting
  - Study



The ground floor will accommodate the main reception area, leading directly to laboratories, teaching and meeting facilities arranged on two levels. There is direct access to the Common Room on a linking mezzanine level – a social hub of the building.



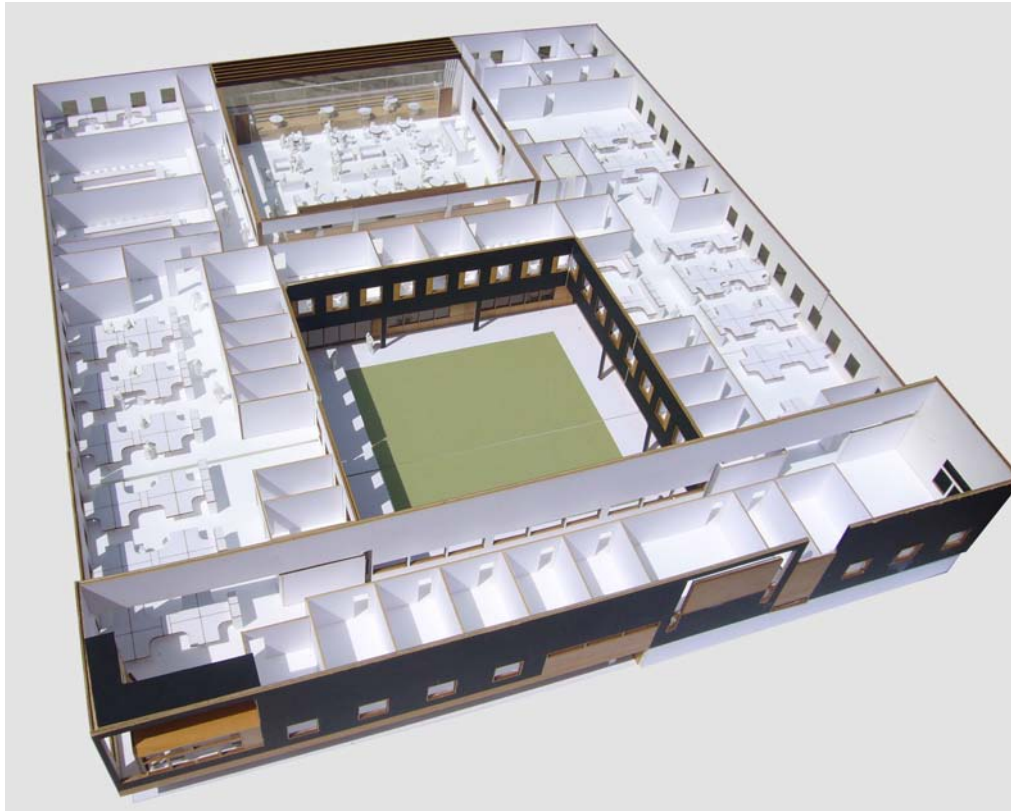
The first floor will accommodate office space for staff and research students arranged around the courtyard, together with additional meeting and seminar rooms, all reached via the the main stairs in the atrium and adjacent to the open Common Room.



*The large open-plan Common Room takes advantage of the open aspect to the rear of the building. Sited at the heart of the building it is designed to promote informal and visible links among staff, students and industrialists, reinforcing the IfM's collaborative, integrated ethos.*

The Alan Reece Building will form an integral part of the IfM's vision to promote and sustain industrial innovation, and will create a dynamic hub for engagement between industry and research.

We welcome the involvement of individuals and businesses who share our vision and want to support us in developing this important new centre into a major international focus for modern manufacturing.



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