SAP® FOR HIGHER EDUCATION & RESEARCH

INDUSTRY OVERVIEW

THE BALANCING ACT:

The SAP® portfolio of Web-enabled solutions represents the world's most complete and integrated offering for higher education and research.

SHAPING THE FUTURE FOR HIGHER EDUCATION AND RESEARCH INSTITUTIONS

Has it ever been more challenging for universities, colleges, and research institutions to succeed in their core missions? Reduced funding from traditional sources has trimmed revenues, and competition for private funding – including grants, endowments, and alumni donations – is growing. Burgeoning student populations are creating physical space and service challenges. Government regulations pressure institutions to operate with a high degree of transparency, which intensifies the need to report, document, and track financial, demographic, and educational information. Demographic and regulatory reporting requirements are prompting additional spending on human resources management systems. Demand for corporate outreach and continuing education programs is increasing. Competition has intensified for the best students, faculty, and academic and research professionals.

To address these myriad challenges, higher education and research institutions need to leverage IT that aligns with business requirements and supports change. Organizations need to operate more efficiently and integrate processes, from business services to academic affairs and student care, while collaborating externally with government agencies, service providers, and other constituents. Yet many organizations still use fragmented, nonintegrated business systems. Inefficient, outdated, and expensive to maintain, these systems foster decision making that is tactical and reactive at best.

SAP for Higher Education & Research is a portfolio of highly scalable solutions specifically designed to meet the unique needs of public and private universities, multicampus institutions, research agencies, and medical colleges. SAP for Higher Education & Research supports all organizational processes, including campus management for student and academic services, grants management, student life-cycle management, financials, operations, human capital management, procurement, analytics, research, and asset management.

SAP for Higher Education & Research helps you sustain the continuing cycle of innovation and standardization in a single technology environment. The solutions are powered by the SAP NetWeaver® platform, which allows you to create applications on top of existing infrastructure and fully leverage current IT investments – for long-term adaptability, reduced costs, and flexible response to changing strategies. That's a challenge for excellence we meet every day, serving hundreds of higher education and research institutions in dozens of countries worldwide.

BUILDING A BETTER INSTITUTION

SAP for Higher Education & Research helps you enhance operational efficiency and improve faculty, staff, and student services by achieving the following objectives.

Reducing Costs Through Efficient Management

The SAP® solutions support all processes from front office to back office – including those involving prospects, students, and alumni, as well as financials, operations, procurement, human capital management, reporting, and analytics. Support for integrated workflow results in fast, organized, and productive management processes across the campus and research community. The SAP Campus Management application uses powerful customer relationship management tools to help you manage the full student life cycle. Part of the mySAP™ ERP solution, SAP Campus Management is integrated with financial and human capital management solutions without interfaces or duplication of data structures. This streamlining saves time and money during the implementation phase as well as in ongoing maintenance.

Your employees can work more productively with student life-cycle and academic records, funds management, personnel management, and financial and student accounting – accessible and all in one place. Timely, consistent data such as key performance indicators (KPIs), reports, analytics, balanced scorecards, and performance-based budgeting supports informed decision making.

Employees can accurately determine the real costs of a research project or program of study, for example. Management can precisely track and manage resources – such as personnel, finances, materials, and physical assets.

Unifying People, Information, and Processes

Many higher education and research organizations spend the bulk of their IT budgets on maintaining existing infrastructure and integrating heterogeneous systems, leaving few resources for innovation. Tying disparate systems

together in single, point-to-point interface projects is costly and results in an increasingly rigid IT landscape – resisting extension to a broader set of participants, such as students, staff, suppliers, and partners. The SAP NetWeaver platform, on the other hand, integrates people, information, and business processes and reduces complexity and cost.

"SAP technology is underpinning a new era of financial autonomy for Austria's universities that enhances our ability to grow revenue by attracting prestigious research grants and offering leading-edge courses of study."

Alexander Hammer, Financials and Controlling Manager, University of Vienna

With SAP NetWeaver, you receive mobile, portal, collaboration, knowledge management, business intelligence, master data management, integration broker, business process management, and application server technologies in one solution.

SAP NetWeaver easily integrates information and applications from virtually any source. It is interoperable and extensible with both Microsoft .NET and IBM WebSphere and supports Sun's J2EE. As a result, you can extract more value, business insight, and ROI from your existing systems. This interoperability preserves your investments in mission-critical business applications – preventing vendor lock-in and lowering overall total cost of ownership (TCO). In addition, using a single, comprehensive platform makes your IT landscape more reliable, scalable, and adaptable to changing business requirements.

Meeting Compliance and Governance Requirements

SAP NetWeaver allows you to meet demands for accountability and financial transparency with executive dashboards, alerting and reporting, security and identity management, content and records management, and workflow and business-process management. Deploying a common platform helps

you meet risk mitigation objectives and comply with directives such as SEVIS and OMB Circular A-21 in the United States, the Bologna Declaration in Europe, and the higher education structural reform movement in Japan.

Promoting a Customer-Focused Mind-Set

SAP solutions help you improve the efficiency of communications with various stakeholders and foster a focus on the "customer." In today's competitive academic environment, organizations must differentiate themselves by providing personalized, timely, and easily accessed information. The mySAP Customer Relationship Management solution helps you provide 24/7 access to your stakeholders, conduct targeted student recruitment campaigns, and support alumni and donor call centers. You can monitor and build partnerships with the business community, improve institutional communication, and develop and reinforce your organization's brand.

Supplier relationship management and supplier self-service functionality help you process vendor payments quickly, contain procurement costs for supplies and services, increase visibility into spending, support timely replenishment of stock levels, and shorten procurement cycle times. Self-service requisitioning reduces the cost and streamlines the effort required to complete purchasing tasks while enabling user access any

time. Employee and manager self-service features can reduce your administrative costs. Users can get answers quickly and conduct their own procurement, time management, travel and expense, budget, staffing, and training transactions. Because SAP solutions incorporate a broad range of interaction technologies – including Web browser, voice, and mobile devices – users gain easy access to internal and external business content, applications, and services.

> "After the implementation of SAP Grants Management, which took just weeks, we had, for the first time, all the information on any specific grant in one place."
>
> Omar Benaddi,
> SAP Systems Manager,
> University of Leeds (UK)

THE BUSINESS OF HIGHER EDUCATION AND RESEARCH

SAP solutions help you improve student services, gain financial control, enhance operational visibility, improve strategic decision making, and reduce costs. The solutions support the following key business activities.

Student life-cycle management – Supports all aspects of the student life cycle, including recruiting, admissions, enrollment, registrations, academic advising, course management, student accounting, degree auditing, and academic program management. Seamlessly manages the processes of the student academic cycle using individualized workplaces, from streamlined admissions and registration processes to graduation and alumni records. Enhances the student experience by providing an integrated Web-based solution to apply for admission, enroll for classes, register, make payments, check grades, monitor progress, simulate degree auditing, and get important information and documents online – without standing in long lines at multiple offices.

Grants and funds management – Helps organizations compete for and manage a variety of department and sponsored grant programs, endowments, and research awards across their life cycles – including proposal development and submission, budgeting, award, spending and payroll, reporting, renewal, closeout, evaluation, and analysis. Provides principal investigators, fund accountants, and research administrators with timely and accurate information on financial activities and transactions, ensuring that sponsored programs are conducted according to a sponsor's requirements.

Financial management, budgeting, and planning – Supports proactive financial planning, real-time budget visibility, and consolidated financial reporting. Streamlines cash flow activities and optimizes financial transactions through enhanced visibility into financial processes, including treasury management, billing, dispute resolution, collections, receivables, and payables – in a single, consistent, reconcilable, and auditable solution.

Relationship management, institutional development, and enrollment management – Provides personalized multichannel communication to internal and external constituents, such as prospective students, program sponsors, funding donors, high school guidance counselors, grantor organizations, current students, and alumni. Helps decision makers plan and manage the entire enrollment process and effectively promote continuing education opportunities. Users can collect, manage, and analyze data from multiple sources (including non-SAP systems) via multiple points of access (such as telephone, Web, and wireless devices).

Governance and compliance – Allows you to collect, document, assess, remediate, and attest to internal control processes and safeguards, ensuring transparent business activity. Lets you configure controls to define rules and tolerances and customize internal processes for security, reporting, and error prevention. Documents all internal control processes, making them visible to executives, auditors, and regulators.

Human capital management – Simplifies and streamlines workforce-related processes while ensuring that employees' needs are addressed. Helps you build better relationships with employees through personalized self-services and more flexible compensation and reward models. Supports the complete employee life cycle in one unified, integrated application through every phase of employment, from recruitment through training, development, and retention. Aligns employee goals with organizational goals and streamlines and integrates essential processes such as administration, payroll, time management, and legal reporting.

"SAP [software] gives us greater insight into our spending habits, which enables us to source for best-value suppliers and negotiate the most favorable trading terms. It will also allow us to collaborate more closely with suppliers and build stronger relationships with them."

Alexander Hammer, Financials and Controlling Manager, University of Vienna

"Implementing an enterprise-wide software system transformed the business infrastructure of the University of Nebraska. For the first time, we had a fully integrated system supporting financial management, human resources, payroll, and related business activities."

Walter Weir,
CIO, University of Nebraska

Procurement – Minimizes spending costs through strategic sourcing, supplier and contract management, and expenditure analysis. Supports plan-driven and ad hoc purchasing, conducts accurate spend analysis, and ensures compliance with procurement best practices. Enhances supplier relationships throughout the procurement value chain, including supplier qualification and selection, bid invitations, vendor evaluations, and contract negotiations. Enables procurement self-service so that faculty and staff can initiate requisitions from preapproved sources.

Enterprise asset management – Helps you reduce maintenance costs, improve capital expenditures management, and increase property, equipment, plant, and facility utilization through enhanced enterprise asset management. Manages the asset life cycle from bus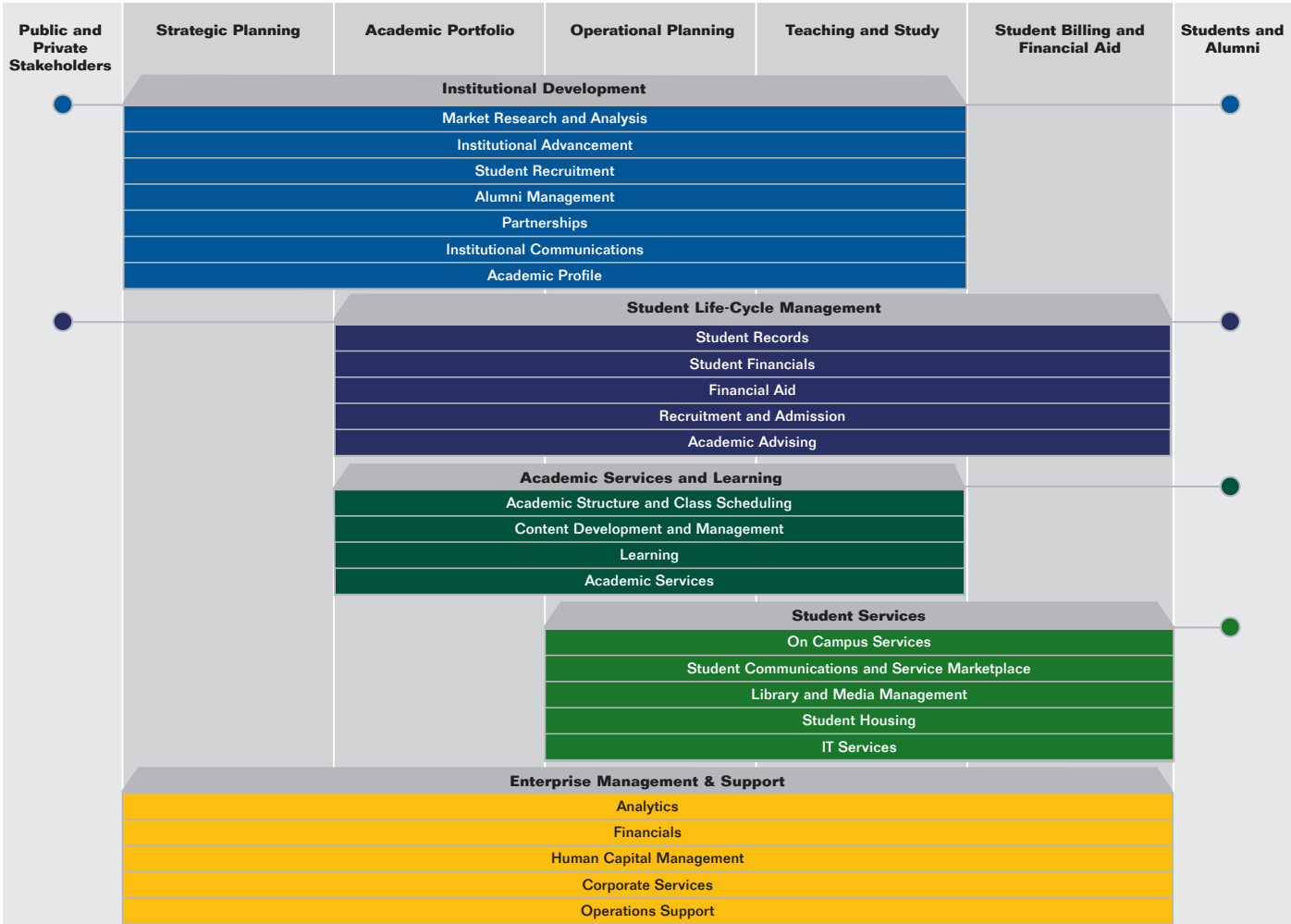iness planning and procurement to deployment and reliability-centered maintenance to disposal and replacement. Lets you conduct mobile asset management with integration of radio frequency identification (RFID).

Business services – Streamlines administrative processes and improves efficiencies in real estate management and project portfolio management. Helps you gain visibility over real estate costs and expenses across the organization, providing information on the efficiency of property and real estate investments. Lets you plan, manage, and control projects and costs, schedules, commitments, risks, and priorities. Provides real-time project visibility on important key figures over multiple projects, including resources deployed, budgets allocated, and critical milestones.

Performance management – Enables you to integrate, analyze, and disseminate business-critical information from SAP and non-SAP systems through an interoperable business intelligence solution. Helps you track, understand, and manage performance across operational areas, including student admissions, student affairs, human resources, finance, and operations. Fulfills reporting requirements with minimal manual intervention. Creates and publishes customized, interactive reports to support decision making at every level.

Public and Private Stakeholders	Strategic Planning	Academic Portfolio	Operational Planning	Teaching and Study	Student Billing and Financial Aid	Students and Alumni

Institutional Development
- Market Research and Analysis
- Institutional Advancement
- Student Recruitment
- Alumni Management
- Partnerships
- Institutional Communications
- Academic Profile

Student Life-Cycle Management
- Student Records
- Student Financials
- Financial Aid
- Recruitment and Admission
- Academic Advising

Academic Services and Learning
- Academic Structure and Class Scheduling
- Content Development and Management
- Learning
- Academic Services

Student Services
- On Campus Services
- Student Communications and Service Marketplace
- Library and Media Management
- Student Housing
- IT Services

Enterprise Management & Support
- Analytics
- Financials
- Human Capital Management
- Corporate Services
- Operations Support

Figure 1: Key Business Processes for Higher Education and Research Mapped to SAP® Solutions

"Ole Miss partnered with SAP because of the richness of its functionality and SAP's commitment to continuously improve its products to meet customers' needs."

Buster Hale, Vice Chancellor for Information Technology, University of Mississippi

"SAP Business Intelligence is an enterprise-wide information hub,
providing a strategic approach to information management that delivers
key information to decision makers in the form and at the time they
need it to take effective action."

Tan Bee Guan, Assistant Director, Corporate Information System Group,
National University of Singapore Computer Centre
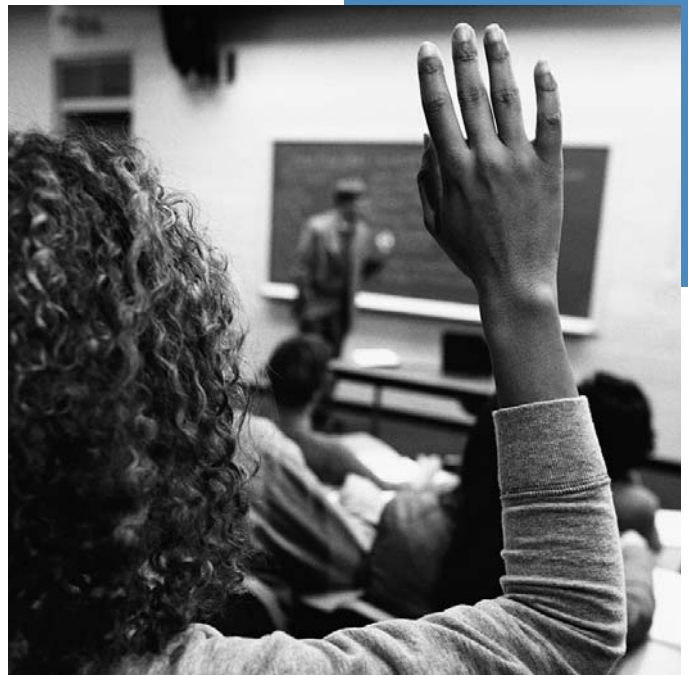
MODERNIZE YOUR IT LANDSCAPE, LOWER YOUR TCO

The SAP for Higher Education & Research solution portfolio is designed specifically to meet the needs of organizations like yours. SAP invests vigorously in research and development activities; our investment frees your IT resources from extensive programming activities and allows you to focus on developing services, infrastructure, and strategic support. When additional development is needed, Enterprise Services Architecture, the SAP blueprint for a service-oriented architecture, allows you to develop programs and applications such as Web services or composite applications to support key business processes.

The SAP NetWeaver platform builds on the power of Web services to deliver a service-oriented architecture that provides flexibility and business efficiency without increasing costs. With the open, standards-based SAP NetWeaver Portal component, your organization can enable collaboration, knowledge management, and role-based access to IT systems and Web services.

With this foundation, SAP for Higher Education & Research helps you enhance and modernize your IT infrastructure, building a strong link between software technology and business operations. The solutions enable you to generate IT savings through standardized business and academic processes. Platform consolidation helps you save on system maintenance and IT training, and system consolidation reduces the need for multiple interfaces. You reduce TCO by leveraging these solutions and integrating existing system functions into the new infrastructure.

"SAP [software] empowers the user to perform business processes in a self-directed, decentralized, online environment and provides access to current data through user-initiated reports and drill-down functionality, as well as a stable, technically sound operating environment with good response time and minimal downtime."

Mike Justus,
Vice President of Finance,
The University of Nebraska System

CONSIDER VALUE AND BENEFITS, AND YOU'LL CHOOSE SAP FOR HIGHER EDUCATION & RESEARCH

Activity	Advantage
Financial planning, budget, and fund management	Improved efficiency of budgeting and planning processes through cross-organizational financial control and visibility. Centralized financial and management reporting. Increased visibility of working capital, streamlined cash flow activities, reduced billing and payment costs, optimized financial transactions, and simplified financial consolidations across the organization.
Grants management	Improved effectiveness of grant administration from pre-award to post-award, across multiple fiscal years, with enhanced accuracy of spending tracking. Improved support for compliance with regulations and guidelines, such as OMB Circular A-21 in the United States. Unified sponsored-program life cycle for enhanced funding streams while supporting academic research missions. Enhanced competitiveness in pursuing grant funds. Reduced manual processes and workload in planning, managing, and reporting grants.
Human capital management (HCM)	Reduced cost for common HCM processes such as recruitment, administration, payroll, time management, and legal reporting. Enhanced alignment of employee goals with organizational strategies. Maximized impact of training with reduced training costs. Accelerated time to productive employees. Reduced employee turnover. Enhanced support for unique payroll requirements such as deferred pay and unions.
Student life-cycle management	Minimized administrative paperwork through real-time faculty access to student data and automated functionality. Automated and synchronized student life cycle, from prospect to applicant to student to alumni. Enhanced personalization of service to students and staff via self-service portal access. Increased security over sensitive student records. Improved advisory services through consolidation of real-time student data. Automated fee calculations and billing processes for improved cash flow. Improved financial accountability through integration with mySAP ERP accounting and reporting features. Enhanced support for flexible program design and changes.
Procurement	Reduced purchasing expenses without compromising supplies for researchers, instructors, administrative staff, and asset maintenance employees. Enhanced complete procure-to-pay process, including integration of suppliers into the operational process. Maximized opportunity for volume discounts on procured goods and services. Reduced procurement cycles and excessive inventory carrying costs. Decreased maverick buying through self-service features, enhanced contract compliance. Streamlined supplier payment process.
Enterprise asset management	Reduced break and fix repair work and equipment downtime. Improved capital expenditure management. Increased equipment and asset utilization. Maximized efficiency for work-order processing. Enhanced asset life-cycle management from procurement to asset replacement. Increased RFID mobile communication needed for asset management, including Web services, pagers, mobile devices, and handheld devices.

Activity	Advantage
Business process integration	Enhanced efficiency of workflow processes through integrated systems. Improved information and process integration for third-party applications and systems. Lowered TCO of technical environment. Increased collaboration through shared data between departments, organizations, suppliers, partners, and other stakeholders. Reduced need for custom integration. Increased cost savings through reduced integration and maintenance. Enhanced employee efficiency through single point of entry and single sign-on functions.
Constituent relationship management and institutional development	Enhanced institutional responsiveness to all stakeholders. Streamlined enrollment management process. Improved end-to-end customer relations, from applicant to alumni. Increased effectiveness of corporate outreach efforts to promote continuing education.
Performance management	Efficient storage of business intelligence data from across the organization for reporting and analysis. Enhanced security of access to integrated data. Improved decision making by providing real-time, accurate, consolidated data and tracking status against specific KPIs and metrics.
Compliance, security, and risk mitigation	Increased compliance with legislative and reporting mandates. Enhanced institutional transparency through a common platform that quickly captures and reports on integrated financial, human resources, payroll, health and safety, and risk management information. Improved protection of sensitive student, financial, and operational data and increased data consistency through master data management functions.

ONLY FROM SAP: PROVEN SOLUTIONS, THE SAFEST CHOICE

SAP has been providing business solutions to higher education and research customers around the world for over a decade. Hundreds of these organizations have succeeded in implementing SAP for Higher Education & Research on time and on budget to integrate and manage their operations.

For more information on how SAP solutions for higher education and research can help you integrate your technology infrastructure end to end, lower your TCO, and increase institutional performance, call your SAP representative today or visit us at **www.sap.com/highered**.

REPRESENTATIVE LIST OF HIGHER EDUCATION AND RESEARCH INSTITUTIONS USING SAP SOLUTIONS

North America

- Massachusetts Institute of Technology
- University of Nebraska
- Central Michigan University
- Baylor College of Medicine, Texas
- Duke University, North Carolina
- Los Angeles Community College District
- Johns Hopkins, Maryland
- Purdue University
- University of Mississippi
- University of Cincinnati, Ohio
- University of Toronto
- The University of Kentucky
- The University of Tennessee
- University of Arkansas for Medical Sciences
- Northern Kentucky University
- Texas State University
- Slippery Rock University
- Clarion University
- Cheyney University
- East Stroudsburg University
- Edinboro University
- Kutztown University
- Indiana University of Pennsylvania
- Lock Haven University
- Mansfield University
- Millersville University
- Shippensburg University
- West Chester University

Latin America

- Universidade Estácio de Sá, Brazil
- Universidad de Montevideo, Uruguay
- Universidad San Martin de Porres, Peru
- ESAN Escuela de Administración de Negocios para Graduados, Peru
- Universidad Externado de Colombia
- Tec de Monterrey, Mexico
- Universidad Tec Milenio, Mexico
- Universidad Pilato de Colombia
- Universidad del Rosario, Colombia
- Colegio Tepeyac, Mexico
- Del Campo International Schools, Honduras
- Universidad FASTA, Argentina

Europe

- University of Zurich, Switzerland
- University of Vienna, Austria
- Freie Universität Berlin
- University of Lausanne, Switzerland
- University of Leicester, United Kingdom
- University of Liège, Belgium
- University of Newcastle, United Kingdom
- University of Warwick, United Kingdom
- University of Basel, Switzerland
- Manchester Metropolitan University, United Kingdom
- Salford University, United Kingdom
- Catholic University of Leuven, Belgium
- City University (London), United Kingdom
- Westminster University, United Kingdom
- University of Abertay Dundee, United Kingdom
- University of the West of England, United Kingdom
- University of Sheffield, United Kingdom
- University of Leeds, United Kingdom
- Scottish Agricultural College, United Kingdom
- Stirling University, United Kingdom
- Napier University, United Kingdom
- University of Northumbria, United Kingdom

Asia/Pacific

- Yonsei University, Korea
- National University of Singapore
- Nanyang Technological University, Singapore
- Singapore Management University
- The Chinese University of Hong Kong
- Chulalonkorn University, Thailand
- Monash University, Australia
- Universiti Teknologi Petronas, Malaysia
- La Trobe University, Australia
- Royal Melbourne Institute, Australia

Africa

- University of Cape Town, South Africa
- American University in Cairo, Egypt