

European University of Luxembourg EUNI Research Institute – Policy Guidelines

Research strategy and quality management

What is the EUNI institution's research strategy?

- A focused- rather than broad – research strategy – Building a niche as the institute is young and needs visibility in certain specific areas + Need for public funding
- Needs-based research: focus based on the **National Research and Innovation Strategy** (Luxembourg government) – Anchoring science in society (Societal relevance)
 - Diverse and sustainable knowledge society (2030) and secure digital society- Vision Luxembourg 2030- Artificial intelligence

Four interdisciplinary research priority areas to prepare Luxembourg for the future

1. Industrial and **service transformation**
2. **21st century education**
3. Personalized health care
4. **Sustainable and responsible development**

Dissemination of research:

- Peer-reviewed journal
- Scientific conference organizations
- Online events
- Research-based education
- Outreach activities to industry

Research priorities:

- Research program in finance
 1. The impact of financial innovation (e.g., derivatives, financial technology and digital finance) on the banking, securities and investment fund industry;
 2. Blockchain and cryptocurrencies and its impact on traditional financial services and in particular financial markets infrastructures;
 3. Artificial intelligence and finance
 4. Law of digital finance

- Research program in entrepreneurship
 5. Research on theoretical, conceptual and practical foundations of entrepreneurship;
 6. Entrepreneurship in digital society
 7. Entrepreneurship in digital finance
 8. Identifying entrepreneurial opportunities;
 9. Scaling entrepreneurial finance: Early stage and late stage financing for start-ups;
 10. Creating entrepreneurial culture;
 11. Corporate governance in new start-ups/Ventures;
 12. Social entrepreneurship
 13. Comparative entrepreneurship (US and EU): e.g., Why so much entrepreneurship in the US and so little in the EU? What can the EU learn from the US?
 14. Financing entrepreneurship/entrepreneurial finance: Including sources of funding for entrepreneurs, such as Crowdfunding, initial coin offering (ICOs), accelerators and incubators, University-based seed funds, angel investors, venture capital funds, private equity, etc.;

- Innovation, technology and education
 - Policy & system level*
 15. ECOSYSTEMS: Development of edtech ecosystems, including national edtech agencies
 16. MEDIA Digital media outreach and engagement in the education sector, including use of social media
 17. POLICY: Edtech policy development
 18. STI: Developing national capacities related to science, technology & innovation

Infrastructure

19. CLOUD: The cloud / datacenters in education

20. CONNECTIVITY: Connectivity for schools & learning, esp. in rural environments
21. DEVICES: Edtech devices (handhelds, mobile phones, whiteboards, probeware, etc.)
22. ENERGY: Energy to support technology use in education (e.g. solar)
23. IOT: Internet of things, sensors
24. LEARNING SPACES: Architecture and learning spaces
25. NRENs: National Research & Education Networks
26. PLATFORMS: Digital platforms, tools and infrastructure in education, esp. open source
27. SECURITY: Digital security in education

Teachers & teaching

28. DISTANCE LEARNING: Teaching and learning at a distance
29. PEDAGOGY: Pedagogical approaches to teaching with technology
30. TEACHERS: Teacher professional development and using tech to support teachers

Educational content & learning resources

31. ADAPTIVE LEARNING: Personalized and adaptive learning platforms and tools
32. GAMING: Educational gaming / video games in education
33. IP/OER: Intellectual property (IP) issues in education, including those related to Open Educational Resources (OER)
34. LEARNING MATERIALS: Digital learning resources & e-textbooks
35. PORTALS: National online educational portals
36. VR/AR: virtual reality & augmented reality in education

Skills

37. DIGITAL SKILLS: Digital literacy, digital skills, coding
38. LITERACY: Technology to promote literacy
39. MAKERS: Makerspaces, fablabs and robotics
40. SAFETY/ETHICS: Student digital safety & ethical use of tech
41. STEM/STEAM: Skills and competencies related to science, technology engineering, (arts,) & mathematics
42. 21c SKILLS: 21st century skills, non-cognitive & socio-emotional skills + technology

Assessment

43. TESTING: Computer-based assessment & testing
44. TESTPREP: Test prep & related tutoring with technology

Data

45. AI/ML: AI and machine learning in education
46. - BIG DATA: Big data in education
47. BIOMETRICS: Biometrics in education
48. BLOCKCHAIN: Blockchain in education

- 49. DATA COLLECTION: Technology & data collection (SMS surveys, handheld devices, etc.)
- 50. DATA VISUALIZATION: Data visualization in education
- 51. DIGITAL IDENTITY: Digital identity in education
- 52. EMIS: Education management information systems
- 53. INDICATORS: Indicators related to edtech
- 54. MAPPING: GIS and mapping
- 55. PRIVACY: Data privacy in education

Evaluation

- 56. EVALUATION: How to evaluate edtech
- 57. RESEARCH: State of edtech research & impact evaluation

Money

- 58. COSTS: Costing of edtech
- 59. MOBILE PAYMENTS: Mobile payments in education
- 60. PROCUREMENT: Procurement of edtech
- 61. STARTUPS: Edtech startups and incubators

Target groups

- 62. COMMUNITY: Community engagement through ICT
- 63. ECD: Early childhood development % technology
- 64. HIGHER ED: Technology in higher education, including MOOCs
- 65. LIFELONG LEARNING: Technology & adult education / lifelong learning
- 66. REFUGEES: Technology & education of refugees
- 67. SPECIAL NEEDS: Technology and special education needs (SEN) / disabilities

- Research program in management

68. Corporate Social Responsibility

research explores business impact of delivering economic, social, and environmental benefits to stakeholders

69. Business and Government

researchers study the economic, political, social, and legal environment in which businesses operate. Drawing from perspectives of economic theory, political science, and history, they examine the “rules” and policies established by government and other non-business institutions that affect business in the United States; turn to history to understand the origins of today’s business environment as well as some of the alternatives that have emerged from time to time; and study other countries’ business environments and their historical development. This group of scholars is deeply interested in the impact of globalization and the way rules are emerging to govern international economic transactions as globalization proceeds.

70. Entrepreneurship

research focuses on the identification and pursuit of entrepreneurial opportunities; domestic and international funding of entrepreneurial endeavors; innovation, particularly technological innovation in international ventures; the environments in which entrepreneurs make decisions; and social entrepreneurship.

71. Performance Measurement and Outcomes

scholars study drivers and effectiveness of performance measurement and management control systems.

72. Market Design

seeks to translate economic theory and analysis into practical solutions to real-world problems.

73. Finance researchers

strive to understand how managers and firms make value-enhancing decisions; and how financial institutions, markets, and instruments contribute to this process.

74. Globalization

scholars concentrate on the effectiveness of management practices in global organizations; cross-cultural learning and adaptation processes; the challenges of taking companies global; emerging-market companies with global potential; and international political economy and its impact on economic development.

75. Health Care

research studies how potential application management principles and best practices from other industries can be applied; how the process of innovation can be improved; how principles of strategy and consumer choice can be utilized; how information technology can expand access, decrease costs, and improve quality; and devising approaches in developing nations can impact global health.

76. Human Behavior and Decision-Making

research focuses on individual and interactive judgment and decision making, with applications to organizational behavior, consumer behavior, behavioral operations, and behavioral economics. Research topics include the psychology of conversation, ethical decision-making (including cheating and self-deception), the impact of rituals on mourning and consumption, team and organizational dynamics and performance, whether money makes people happy, when and why people disclose information, and health behavior change.

77. Leadership

research explores questions of organization change, power and influence, innovation management, and the crucial role leadership plays in organizational success. The topic of leadership spans all academic units at HBS and fosters a collaborative and multi-disciplinary approach.

78. Social Enterprise

research seeks to understand the challenges associated with driving sustained, high-impact social change. Current research focuses on leadership of socially mission-driven organizations; the role of business leaders and corporate citizenship in driving social change; business models that address poverty; management of high-performing K-12 public school districts; and financing models for the non-profit sector

79. Technology and Innovation

research focuses on value creation of platforms and two-sided markets; use of open architecture and leverage of its collective value; development and execution of innovation strategies; innovative attributes of executives and firms; development of new markets through the creation of disruptive innovations that displace earlier technologies; development of innovations in sectors; and the impact of innovation on economic growth.

80. Other.

It is impossible to capture all that EBU faculty study. If you have a specific interest in an area not listed above, please select this category to describe an area of research within the disciplines of economics, sociology, psychology, policy, or history that is relevant to business academia.

What QM mechanisms exist for the University's research?

- Research quality, integrity and reliability depends on safeguards
- Respecting and going beyond the existing codes of ethical scientific practice
- Self-evaluation
- Evaluations by external committees (regular audit by a committee of external experts) / once every 4-6 years)
 1. Audit committee: Evaluating the scientific and societal impact of the research
 2. Assessing Programs and the quality of the supervision of DBA candidates within EUNI institute/EBU,
 3. The University's Board of Directors, the EBU Administration Council and the institute members would consider the finding of the research audit to modify and update the research strategy if needed.
 4. Making the assessment results public or disclosing them to those whom the results matter.
- Accreditations and Rankings