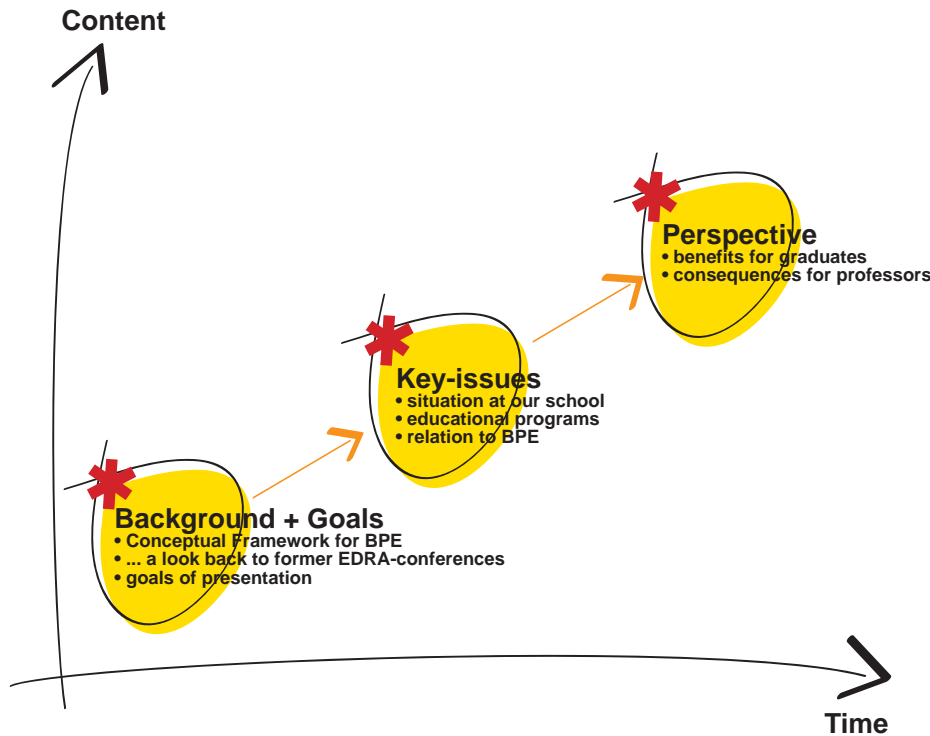


International Building Performance Evaluation (IBPE)

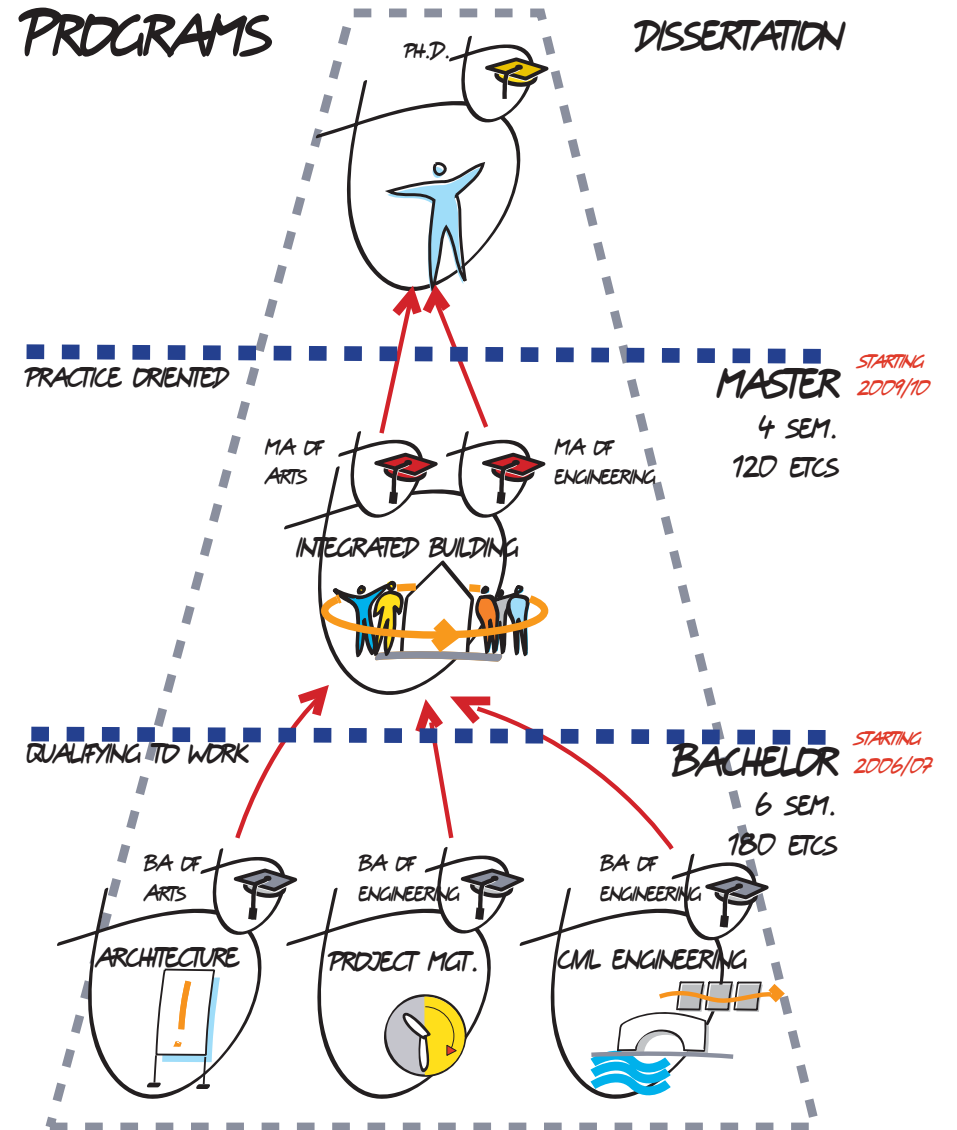
How Building Performance Evaluation Fits into the German Educational Program

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What is the structure of the presentation?

- starting point: background + goals
- report from university: key-issues
- results in view of benefits and consequences: perspective



How do the programs change?

- Bologna-Process 1999: Bachelor/Master instead of Diploma
- 3 Bachelor programs: 3 years, qualifying to work
- 1 Master program: 'Integrated Building', another 2 years
- BPE is basic in BA Project Mgt., is also part in MA program

Subjects BA-program Construction Project Management

1.-3. Semester Basic Knowledge Required Subjects Introduction Construction Structural Engineering 1 Building Physics 1 Building Materials Drawing Design Law Mechanical Equipment Planning Management Technical English 1 Business & Economics Mathematics Site Organization 1 Site Organization 2 Building Type Analysis Facility Management/Bldg. Perf. Evaluation	Options Basic Knowledge (2 Subjects) Technical English 2 2. Language i. e. Spanish 1, Russian Structural Engineering 2 Soil Mechanics
3.-5. Semester Specialized Knowledge Required Subjects Sustainability Site Organization 3 Business Management Calculation/Claim Management Facility Programming Controlling Cost Management Major Project	Options Specialized Knowledge (4 Subjects) Interior Design Health & Safety Standards Computer Science 1 Site Organization 4 IT-Tools Technical English 3 2. Language i. e. Spanish 2
6. Semester Application Practical Training (13 weeks/3 months) Bachelor-Thesis (2 months)	

How does the curriculum reflect the issue of BPE?

- lectures to teach basic information (phases and loops)
- exercises to develop methods, tools and other capabilities
- focus on both hard facts i. e., technical knowledge, and soft skills i.e., personal competencies (case studies in teams)

Grundlagen PMB Teil 2 / Facility Management / SS 09
 V 2P - Do., 9.45 - 11.15 Uhr, Raum A 250

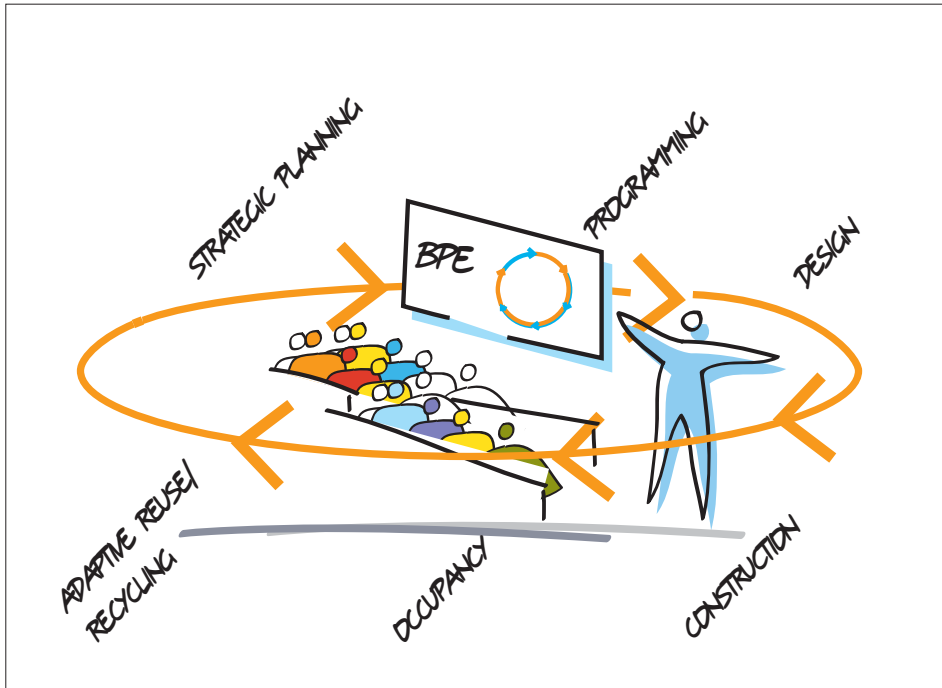


Facility Management / Building Performance Evaluation

- | | | |
|-----------------|--|---|
| 1/ Do., 26.03. | Importance of FM | <ul style="list-style-type: none"> • Organization and Literature • Context, Terms, Definitions |
| 2/ Do., 02.04 | The Building Life Cycle | <ul style="list-style-type: none"> • Linear Process / Sparkasse Hagen • Cycle / Feedforward / BMW I |
| 3/ Do., 09.04. | Participants and Communication within the Building Life Cycle | <ul style="list-style-type: none"> • Project Phase - Object Phase • Planners - Users |
| 4/ Do., 16.04. | Phase I: Strategic Planning
Loop 1: Effectiveness Review | <ul style="list-style-type: none"> • strategic / operative FM • edra 34: Roche UK I |
| 5/ Do., 23.04. | Phase II: Facility Programming
Loop 2: Program Review | <ul style="list-style-type: none"> • ISO 9699 / Peters: CRSS • DIN 18205 / Roche UK II |
| 6/ Do., 30.04. | Phase III: Design
Loop 3: Design Review | <ul style="list-style-type: none"> • Gutenb'g-Gym. Erfurt /Königsplatz KS • Stadthalle Regensburg / BMW III |
| 7/ Do., 07.05. | Phase IV: Construction
Loop 4: Commissioning | <ul style="list-style-type: none"> • Gesamtschule Hübner / Stgt. is build. • User Manual Behnisch |
| 8/ Do., 14.05. | Phase V: Occupancy 1
Loop 5: Post-Occup. Evaluation | <ul style="list-style-type: none"> • DIN 18960 / DIN 32736 • POE, STM, DIFA |
| 9/ Do., 21.05. | no lecture (Himmelfahrt) | • time to read or work |
| 10/ Do., 28.05. | no lecture (edra Kansas City) | • time to read or work |
| 11/ Do., 04.06. | Phase V: Occupancy 2
Loop 5: Post-Occup. Evaluation | <ul style="list-style-type: none"> • DIN 18960 / DIN 32736 • POE, STM, DIFA |
| 12/ Do., 11.06. | no lecture (Fronleichnam) | • time to read or work |
| 13/ Do., 18.06. | Phase VI: Recycling
Loop 6: Market Analysis | <ul style="list-style-type: none"> • edra 35: Roche UK II / ICC Berlin • Graubner / Sparkasse Hagen |
| 14/ Do., 25.06. | Case Study: ‚offices‘ | • Office Concepts / Design |
| 15/ Do., 02.07. | Buffer | • Shock-Memory / Final Exams |

What issues does the agenda of FM/BPE include?

- introduction of the building life cycle with its participants
- considering the 6 sub-phases and the internal review loops
- illustrated with case studies (journals, internet recherche etc.)
- focus on user involvement, feedback and acceptance



What are the benefits of teaching BPE?

- our graduates: think holistical in a life-cycle oriented way
- as professionals: make buildings work better
- their clients: get cost-effective buildings of better quality
- we educators: help „building better in a time of change“

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