

Engineers in Building

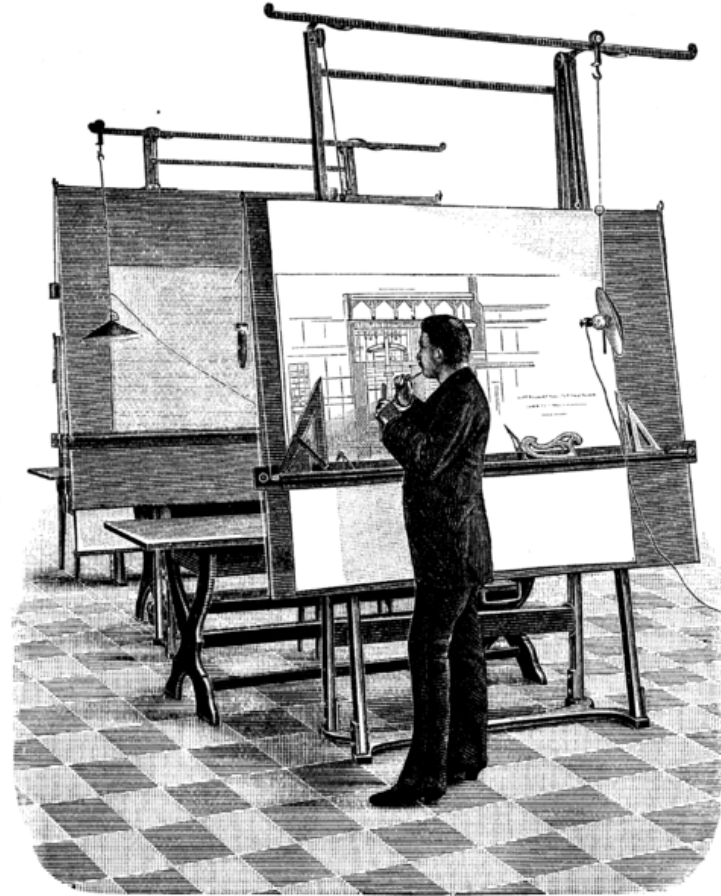
(For Beating Architects or For the Architecture)

EuiJong A. KIM

(INSA de Lyon, EDF)

Lyon conference d'étudiants 2008

Architecture, Architect and Building



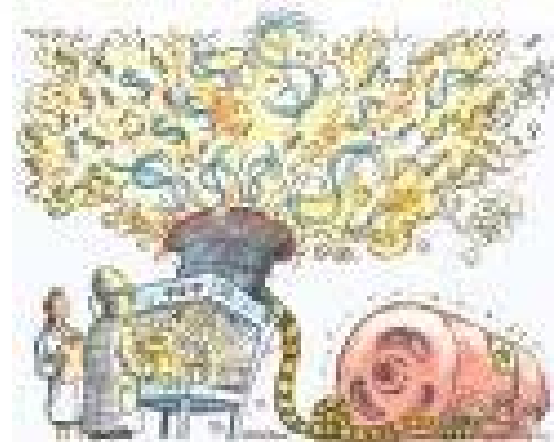
Concept, Monument



Engineering, Engineer

- **the activity of applying scientific knowledge to the design, building and control of machines, roads, bridges, electrical equipment, etc.: The bridge is a triumph of modern engineering.**
- **L'ingénierie désigne l'ensemble des fonctions allant de la conception et des études à la responsabilité de la construction et au contrôle des équipements d'une installation technique ou industrielle.**

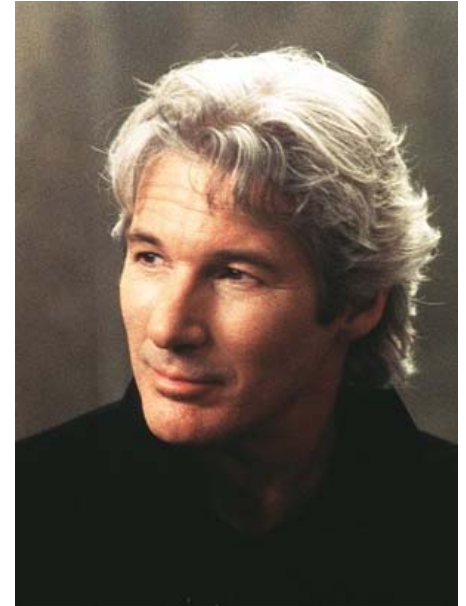
Money and Efficiency



Engineers and Traditional Hierarchy



Structure Engineer



Architect



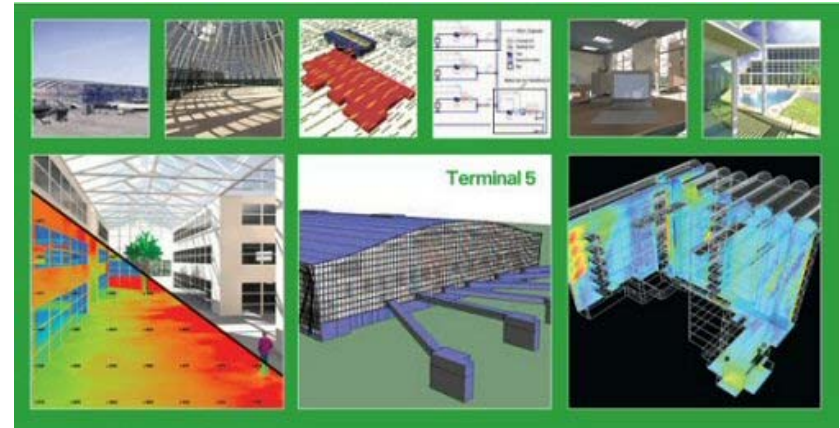
HVAC Engineer (Thermicien)



Construction Engineer

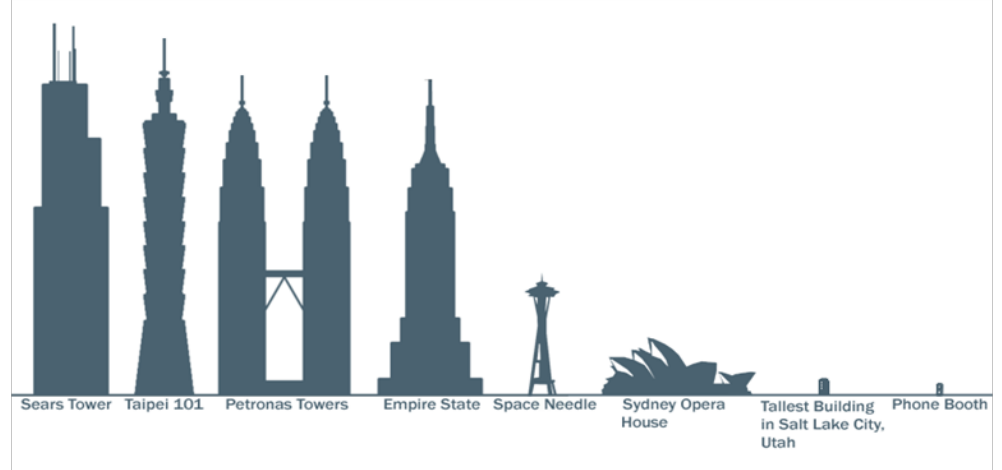
Clients' Desire Now

Energy



<http://maddox.xmission.com>

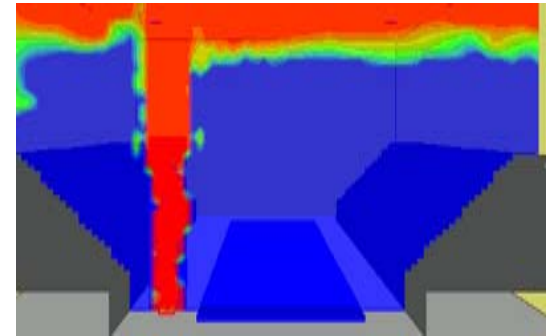
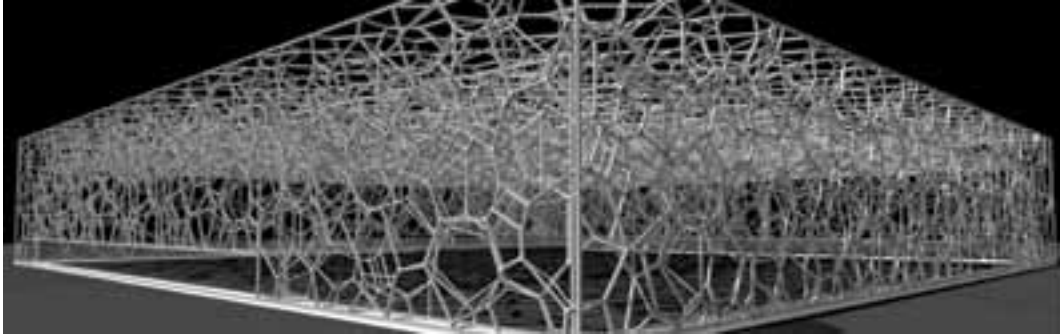
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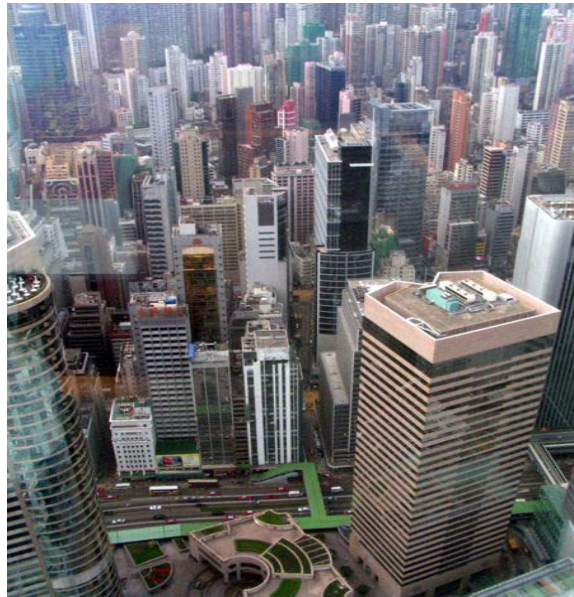
Eiffel



Dome, Skyscrapers



Dome, Skyscrapers



Centre de Pompidou

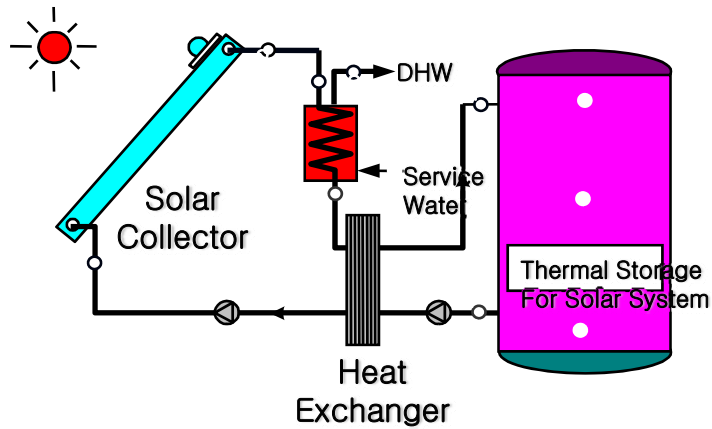




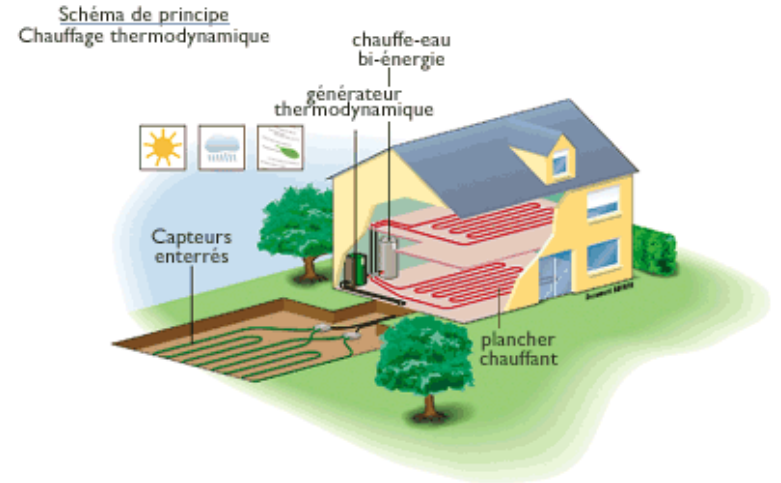
ENERGY - CONCERNED

LYON CONFERENCE D'ETUDIANTS 2008

Renewable Energy



Renewable Energy



Mont-Cenis Academy & Herne Sodingen, 독일



HEAT PUMP AND ENERGY



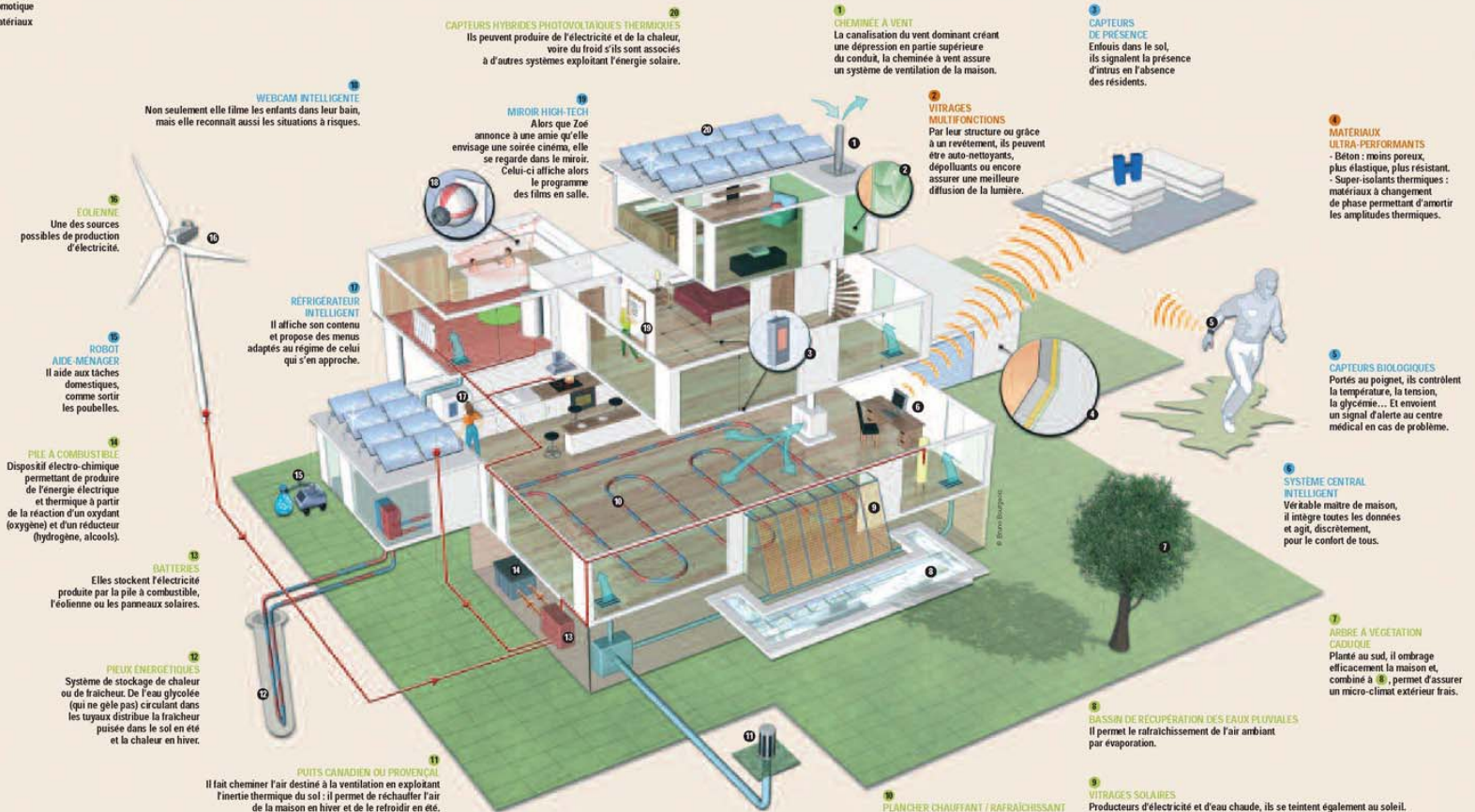
HEAT PUMP AND ENERGY

HEAT PUMP AND ENERGY

Ecologic Architecture (ZEH, HPE, 3LH)

Visite guidée de la maison du futur

- Énergie
- Domotique
- Matériaux



So what's the key qualification for engineer ?

*Communication skills are essential for any profession, but especially to a science related researchers, engineers or administrators to be **effective**.*

(산업체의 경우)

직위	근무시간에서 차지하는 비중(%)				총계
	대화매체	문서작성			
		비정규문서	정규문서	계	
최고경영자	65	10	2	12	77
부장	60	15	2	17	77
실장	45	20	5	25	70
그룹장	40	20	5	25	65
과제책임자/ 선임연구원	30	15	10	25	55
엔지니어	25	15	10	25	50
연구원	20	10	10	20	40
기사/보조원	10	10	2	12	22

순위	학과목	순위	학과목	순위	학과목
1	경영학	14	데이터 처리	27	전기-기계 에너지 전달
2	문장력 (technical writing)	15	시스템 프로그래밍	28	대수학 (집합론)
3	확률과 통계학	16	경제학	29	컴퓨터 엔지니어링
4	발표력 (public speech)	17	일반미분학	30	산업공학 (IR, OR)
5	창의력 (creative thinking)	18	논리학	31	법학
6	개인간 인화	19	경제분석	32	정보제어 시스템
7	그룹간 인화	20	응용프로그래밍	33	수치분석법
8	속독 (speed reading)	21	심리학	34	유체역학
9	대화 (talking with people)	22	신뢰성 평가	35	열역학
10	영업	23	대수학 (벡터 분석법)	36	전자기학
11	컴퓨터	24	회로설계	37	인간공학
12	열전달	25	라플라스 변환	38	재료공학
13	기기사용 및 측정	26	고체물리		



Merci de votre attention!

LYON CONFERENCE D'ETUDIANTS 2008