

UNLV LIBRARY  
MEDIA RESOURCES CATALOG  
**ENGINEERING**  
SUMMER 2009

**Academic Integrity: The Bridge to Professional Ethics.**

Duke University, c1995

"Contains four scenarios about academic integrity, representing four typical cases of ethical decision-making by students ... The principles highlighted ... are, however, basic principles of professional engineering as well"-- Instructor's manual, pref.

1 videocassette (30 min.) + 1 manual (34 p.)  
LB3609 .A234 1995

**Academic Integrity: The Bridge to Professional Ethics.**

Duke University (1995)

Presents four vignettes concerning ethical decision-making by college student. The principles highlighted are also basic principles of professional engineering.

1 videodisc (30 min.) + 1 instructor's manual (34 leaves)  
LB3609 .A234 1995b + Manual

**Against The Grain.**

Video Project (1999?)

Discusses genetically engineered food crops. Asks, are they safe or do they pose serious risks to human health and the ecosystem?

Video Cassette (14 min.)  
Guide (3 p.)  
SB 123.57 A43 1999

**An American Nile.**

PBS Video (1997)

Cadillac Desert relates the story of the epic quest for water and the role it has played in the vast transformation of the American West and many parts of the world. This episode charts the dramatic transformation of the Colorado River from a wild desert waterway with a mind of its own into the most controlled, litigated, domesticated, regulated, and over-allocated river in the history of the world. From the heroic construction of the Hoover Dam during the Great Depression to the bitter political and environmental battles over the potential damming of the Grand Canyon, this program illustrates how the Colorado became so impounded and diverted that by 1969 it no longer reached the ocean.

Video Cassette (56 min.)  
HD 1695. C6 A52

**Ancient Inventions.**

A&E Home Video

Describes examples of technologies found in ancient civilizations that indicate the knowledge of steam power, magnetism, and other principles centuries before they were "discovered" and exploited in more recent times as well as other technologies like the lifting of heavy stones in ancient architecture that are still not understood by modern man.

Video Cassette (90 min.)  
T173.8 A48 1997

**Antibiotics: The Wonder Drugs.**

New Video (1996)

Discusses antibiotics and the fact that there are now bacteria that are resistant to antibiotics because of the overuse of antibiotics.

Video Cassette (50 min.)  
QR 177. A56 1996

**Baked Alaska.**

Spanner Films (2003)

Documentary about how rising temperatures and the battle over the Arctic National Wildlife Refuge (ANWR) are impacting life in Alaska.

1 videodisc (ca. 26 min.)  
QC984.A4 B33 2003

**Beyond Human.**

PBS Home Video (2001)

Discusses the future of bioengineering and robotics, where humans are becoming more machine-like and machines are becoming more human.

Video Cassette (120 min.)

R 856. B48 2001

**Beyond the Moon: Failure is Not an Option 2.**

A&E Television Networks (2005)

In 1969, the engineers of Mission Control assume that America's great push will continue: a moon base, shuttle, space station, manned flights to Mars... But as a growing number of political, social and economic problems vie for the nation's attention - and money - Congress, Presidents, and the American public is not so sure. Is manned space flight really worth the cost? Is it worth the risk? To some, answers to these questions remain unclear even today. But for legendary flight director Gene Kranz and the men and women of Mission Control, there is no doubt. Despite waning public support and shrinking budgets, they still have a job to do, a job where lives hang in the balance and there is no room for error. This video tells the little-known story of America's post-Apollo space program, from the point of view of the engineers of Mission Control. Through their experiences, we get a first hand look at life inside Mission Control, as these driven engineers continue to push the boundaries of spaceflight from 1972 into the new century.

1 videodisc (ca. 100 min.)

TL873 .B49 2005

**The Big Dig: Breaking Ground.**

WGBH (1992)

Discusses Boston downtown traffic congestion and the project which is planned to build an underground thoroughway and the Third Harbor Tunnel, which is called the Central Artery/Third Harbor Tunnel Project.

Video Cassette (60 min.)

HE 356.5 B67 B53

**Brooklyn Bridge.**

PBS Video (1995)

Part 1 details the building of the Bridge, the involvement of the Roebling family in its construction and the many engineering innovations and difficulties involved. Part 2 discusses the Brooklyn Bridge as a symbol of strength, vitality, ingenuity, and promise in American culture.

Video Cassette (60 min.)

TG 25. N53 B76 1995

**Career Path: Mechanical Engineering.**

Alfred P. Sloane Foundation (1997)

Working mechanical engineers talk about careers for mechanical engineers, including what types of work mechanical engineers perform in business and industry, the challenges and opportunities in mechanical engineering and opportunities outside of engineering for other jobs.

Video Cassette

TJ 157. C37

**Careers In Materials Science and Engineering/ Minerals, Metals and Materials Society.**

Alfred P. Sloane Foundation (1997)

An introduction to materials science and engineering, showing the processes and people involved with making familiar products like automobiles and computers.

Video Cassette (20 min.)

TA 403.9 C37

**Change And Motion: Calculus Made Clear.**

The Teaching Company (2001)

24 lectures by Professor Michael Starbird of the University of Texas, Austin cover the concepts of Calculus.

6 Video Cassettes (755 min.)

2 Guide Books

QA 303. C53 2001 pt.1-2

**The Cloning Revolution.**

Films For The Humanities and Sciences  
(1998)

Examines cloning, from its beginnings and the creation of Dolly the sheep, to the latest technology, including the production of customized cells, organs, and animals. Scientists at the University of Massachusetts now use the new technology to modify the organs of animals destined for human transplants. Examines the ethics of these new technologies and practices.

Video Cassette (50 min.)  
QH 442.2 C58

**Conquering the Colorado.**

United States Bureau of Reclamation (1989?, 1936?)

Originally produced by the United States Bureau of Reclamation and Six Companies, Inc. as a motion picture. Publication information provided by Special Collections, University of Nevada, Las Vegas.

Library's copies 1, 2 and 5 are U-matic 3/4 inch, copies 3 and 4 are VHS 1/2 inch. Copy 5 also contains Hoover Dam 1935-1985 : a golden anniversary celebration (16 min.)

Video Cassette (50 min.)  
TC 557.5 H6 C65x

**The Construction of Hoover Dam.**

Finley-Holiday Film Corp. (198-?)

Shows the building of Hoover Dam, including how rock quarries, concrete factories, and even steel mills were built on location to supply the needs of the dam builders.

Video Cassette (36 min.)  
TC 557.5 H6 C853x

**The Cost of Poor Quality.**

Society of Manufacturing Engineers (1995)

H. James Harrington and G. Howland Blakiston review costs engendered by manufacturing for quality and describe ways of eliminating the negative effects of poor quality. Includes case studies.

Video Cassette (35 min.)  
TS 156. C64

**Crapshoot: The Gamble With Our Wastes.**

Bullfrog Films, c2003

A hazardous mix of waste is flushed into the sewer every day. Where does it all go? What does it do to us? Filmed in several countries, this documentary questions whether the sewer is actually compounding our waste problems. Scientists warn of links between sewage practices and potential health risks, while activists, engineers and concerned citizens challenge our fundamental attitudes to waste. Does our need to dispose of waste take precedence over public safety? What are the alternatives?

1 videodisc (53 min.)  
RA567 .C73 2003

**A Crude Awakening: The Oil Crash.**

Docurama (2006)

A documentary film that "debunk[s] the conventional wisdom that oil production will continue to climb, and instead stare[s] bleakly at a planet facing economic meltdown and conflict over its most valuable resource"—Container.

1 videodisc (ca. 85 min.)  
TN870 .C885 2006

**Customer Focused Manufacturing.**

Society of Manufacturing Engineers (1997)

Examines customer-focused manufacturing at Milwaukee Electric Tool Corporation. Discusses cellular manufacturing, kiazen, and just-in-time production techniques used to improve the company's productivity and profitability.

Video Cassette (27 min.)  
TS 157. C87

**Dams.**

WGBS Boston Video (2000)

Changing the course of rivers has changed the course of history. Award-winning author/illustrator, and captivating storyteller, David Macaulay goes to extremes to bring you an unprecedented look at the power of dams. From the banks of the Nile to the top of the Hoover Dam, you'll meet the courageous and ambitious builders, relive the deadly disasters, and discover the little-known personal triumphs and tragedies behind the greatest dams ever built.

1 videodisc (ca. 64 min.)  
TC540 .D372 2000

**A Day In The Life Of A Civil Engineer.**

Alfred P. Sloane Foundation (1997)

Features profiles of practicing civil engineers, speaking from experience about: The variety of employment opportunities available to civil engineering graduates and how to make critical decisions when planning a career; the realities of engineering practice: how civil engineers spend their time; the kinds of problems that they solve; the things that civil engineers find most satisfying; and a candid appraisal of the practice of civil engineering; the transition from school to work; the challenges facing the new engineer; the skills and attitudes that are required for success, and the importance of "lifelong learning".

Video Cassette (20 min.)

TA 157. D38

**Demonstrations In Lasers And Optics.**

Massachusetts Institute of Technology, Center For Advanced Engineering Study (1990)

**tape 1.** Demonstrations in lasers and optics (34 min.) –

**tape 2.** Physical optics, linear polarizer (38 min.)

**tape 3.** Physical optics 7. Reflection at air-glass boundary (31 min.)

**tape 4.** Physical optics 10. Two-beam interference : collimated beams (57 min.)

**tape 5.** Physical optics 18. Plane mirror cavity : collimated beams (38 min.)

**tape 6.** Physical optics 22. Fraunhofer diffraction : adjustable slit (52 min.)

**tape 7.** Physical optics 31. Single mode fiber (18 min.)

**tape 8.** Laser fundamentals 1. Simple laser (47 min.)

**tape 9.** Laser fundamentals 6. Optics of laser beams (61 min.)

**tape 10.** Laser fundamentals 9. Reflection back into laser (44 min.)

10 Video Cassettes

TA 1675 D44x

**The Development Of Television.**

Films For The Humanities and Sciences (1994)

From the first steps of the pioneers Nipkov, Baird, and Zworykin, this program traces the development of television to satellite transmission and HDTV. Also explains how television works.

Video Cassette (15 min.)

TK 6637. D48

**The DNA Revolution.**

New Video Group (1998)

Discusses the moral and ethical aspects of genetic engineering, including cloning and the discovery of DNA.

Video Cassette (50 min.)

QH 442. D22 1998

**Driving Into The Future.**

Chip Taylor Communications (1999)

Discusses how cities will improve traffic flows and how the car of the future will be engineered so it will be less harmful to the environment and safer for the driver.

Video Cassette (30 min.)

HE 333. D75 1999

**Eiffel Tower.**

A&E Home Video (1994)

This historical tour of the Eiffel Tower begins with the engineer behind it, Gustave Eiffel. When it was first built, just over a century ago, it provoked outrage and ire. The challenges and breakthroughs of its construction are examined.

Video Cassette (50 min.)

NA 2930. E33 1994

**Electric Powerhouse.**

Cambridge Educational (2005)

This program looks at the production, transportation, and consumption of electricity. Using the Hoover Dam as an example of efficient hydroelectric power generation, this DVD illustrates how transformers raise or lower voltage to manageable levels and how electricity is specifically channeled to illuminate buildings, power devices, and propel vehicles. It also illustrates the difference between alternating and direct current, and explains the differences between neon and filament bulbs.

1 videodisc (18 min.)

TK1001 .E44 2005

**The 11 Rules of Supercomputer Design Is Illustrated by the Ardent Titan Graphics Supercomputer.**

University Video Communications (1989)

Describes the goals, process and outcome of the design of Ardent's Titan: a vector, multiprocessor architecture, combining high-performance computation and graphics for a single user to create a distributed supercomputing environment to permit instant views of complex simulations like molecular combinations, or the performance of a new airplane wing.

Video Cassette (48 min.)

QA 76. 88 B45x

**Engineering Disasters.**

New Video Group (1999)

Discusses how engineering disasters happen.

Video Cassette (50 min.)

TA 495. E54 1999

**Engineering Disasters 3.**

A & E Television Networks : Distributed by New Video, (2001)

Examines some of history's worst engineering failures caused by errors in design. Includes the construction of Pisa's famous leaning tower in the Middle Ages, the first nuclear reactor disaster in Idaho in 1961, the collapse of a manned U.S. national defense tower off the New Jersey coast in 1961, the deaths of the cosmonauts aboard Soviet spacecraft Soyuz II in 1971, and the failed missions of NASA's Mars Climate Orbiter and Mars Polar Lander in 1999.

1 Video Cassette (ca. 50 min.)

TA495 .E543 2001

**Engineering Disasters4.**

A & E Television Network (2003)

Examines catastrophes of engineering that have caused disasters, mostly in the U.S.

1 Video Cassette (ca. 50 min.)

TA495 .E544 2003

**Environmental Science And Technology.**

PBS Video (1992)

Explores the question of "What does math have to do with saving the planet?" Discusses how math concepts such as inequalities (greater-than, less-than) are applied to solar detoxification, biodiversity, global warming and the engineering of recycling and landfills.

Video Cassette (15 min.)

QA 10. 5 E58x

**Erie canal.**

New Video (2000)

Presents the story of the Erie Canal, the engineering marvel that in the early 19<sup>th</sup> century became the geographical link between New York and the American West.

Video Cassette (47 min.)

HE396.E6 E75 2000

**The Eurotunnel.**

Unapix Entertainment (1998)

Discusses the struggle to link England and France by a railroad tunnel beneath the English Channel.

Video Cassette (52 min.)

TF 238. C4 E87 1998

**Evolutionary Computation And Applications.**

IEEE Educational Activities Dept. (2000)

Introduction of evolutionary computation. Presenters discuss designing evolutionary algorithms for problem solving, evolutionary techniques for vulnerability assessment on power systems, hybrid soft computing systems using fuzzy logic and evolutionary algorithms, and AGDOCK, a software application that utilizes evolutionary computation. Concludes with a roundtable discussion covering practical issues of implementing evolutionary algorithms.

CD-ROM

Guide

QA 76.87 E86 2000

**Evolving Transportation Systems.**

Films for the Humanities & Sciences, [2005]

This program examines developments in road building and the revolutionary impact of canals, and charts the rise and subsequent decline of canals as a good example of social and technological change.

1 videodisc (20 min.)

HC255 .E86 2005

**Faster Than Sound.**

WGBH Boston Video, (1997)

Chronicles the events leading up to the designing of planes that could break the sound barrier without going out of control, interviewing the designers, engineers and pilots who helped achieve supersonic flight.

1 Video Cassette (60 min.)

TL571 .F37 1997

**The Fifty-nine Story Crisis: A Lesson in Professional Behavior.**

Institute of Technology (1996)

William LeMessurier, design and construction consultant on the Citicorp headquarters tower and one of the nation's foremost structural engineers, lectures on technical and ethical aspects of the discovery that the building had structural deficiencies that could make it vulnerable to high winds.

1 videocassette (73 min.)

NA6233.N5 C474 1996

**Food For Thought.**

Video Project (199-?)

Documents how scientists are crossing species that would never breed in nature, such as fish and tomatoes or toads and potatoes. None of these genetically engineered foods are tested or labeled by the government, yet many people are unknowingly eating them everyday.

Video Cassette (29 min.)

SB 123. 57 F65 1990z

**Futures.**

PBS Video (1990)

[Pt. 1]. 101. Agriculture. 102. Aircraft design -- [pt. 2]. 103. Architecture and structural engineering. 104. Automotive design -- [pt. 3] 105. Cartography. 106. Fashion -- [pt. 4]. 107. Water engineering. 108. Optics -- [pt. 5]. 109. Putting man in space. 110. Sound engineering -- [pt. 6]. 111. Statistics. 112. Sports performance.

6 Video Cassettes (58 min.)

6 Teacher's Guides

QA 10. 5 F882x

**Genetic Engineering: Double Edged Sword.**

Films For The Humanities (1998)

Examines the issues that face us as genetic engineering moves out of the research labs. Tries to distinguish between positive research and medical manipulation.

Video Cassette (29 min.)

QH 442. G4543 1998

**Genetic Engineering –Prospects For The Future [slide] /Ibis Media.**

Ibis Media (1981)

Explores the benefits and risks of genetic engineering and shows how the new biotechnology promises to revolutionize agriculture, industry, health, and medicine.

236 Slides

3 Sound Cassettes

1 Guide

QH 442. G455 pt. 1-3

**The Gilded Age.**

PBS Home Video (1997)

An eight-part series presenting American history through its visual art, painting, sculpture, architecture and monuments. This fourth segment examines the many sides of America in the 19th century: the extravagant mansions of Newport's tycoons, the triumph of the Brooklyn Bridge, the haunting realism of Civil War photography, and the artistic creations of John Singer Sargent, James Whistler, Mary Cassatt, Augustus Saint-Gaudens, Thomas Eakins, John Peto, Winslow Homer, John Robling, Louis Sullivan, Isabella Stewart Gardner, and Bernard Berenson.

Video Cassette (58 min.)

N 6510. G53

**Gilbane Gold: A Case Study in Engineering Ethics.**

National Institute for Engineering Ethics of the National Society of Professional Engineers (1988)

Produced to stimulate discussion and to promote ethical conduct in the profession, this case study examines a fictional company that is discharging too much lead and arsenic into a local wastewater treatment plant.

1 videocassette (24 min.)

1/2 in. + 1 guide (11 p.)

TA157 .G54 1989

**Golden Gate Bridge.**

A&E Home Video (1995)

The story of the Golden Gate Bridge, one of the foremost man-made tourist attractions in the United States, which critics said could never be built.

Video Cassette (50 min.)

TG 25. S225 G64 1995

**Growing Power, Shrinking Size.**

Films For The Humanities and Sciences  
(1990)

Program covers the birth of the Apple and explores the development of computers and illustrates the problems and solutions to building faster and more powerful ones.

Video Cassette (26 min.)

QA 76. G76

**The Growth of Towns and Cities.**

Films for the Humanities & Sciences, [2005]

This program examines how industrialization led to urbanization, which led to higher rents and overcrowding, which in turn led to governmental controls; it also shows how railways and improved transportation opened up cities, and led to the growth of suburbs.

1 videodisc (19 min.)

HC255 .G76 2005

**Harnessing Steam.**

Films For The Humanities and Sciences  
(1992)

"This program looks at the role of water power, examines Newcomen's and Watt's machines, looks at the interdependence of steam, coal, and iron and at the new demand for coal, and examines the growth of electric energy."—Container

Video Cassette (20 min.)

TJ 461. H37 1992

**Harnessing Steam.**

Films for the Humanities & Sciences, c1992

"This program looks at the role of water power, examines Newcomen's and Watt's machines, looks at the interdependence of steam, coal, and iron and at the new demand for coal, and examines the growth of electric energy."—Container.

1 videocassette (20 min.)

TJ461 .H37 1992

**Hidden Factors.**

The Institute (1992)

Discusses general issues of appraiser liability as well as specific considerations relating to the identification of hazardous materials on site, the development of support information, and the use of risk maps.

Video Cassette (53 min.)

HD 1387. H47

**Hoover Dam.**

PBS Video (1999)

Story of the building of Hoover Dam.

Video Cassette (60 min.)

TC 557. 5 H6 H66 1999

**Hoover Dam.**

A&E Television Networks (2006)

A look at the design and construction of Hoover Dam.

1 videodisc (ca. 50 min.)

TC557.5.H6 H66 2006b

**Kilowatt Ours: A Plan to Re-energize America.**

KilowattOurs.org, c2008

Documents the devastating consequences of the predominantly coal and nuclear powered economy in the southeastern United States. Solar panels, energy efficient lighting, and geothermal heating are a few of the solutions to reduce energy costs that are demonstrated by home owners and individuals representing businesses and government agencies.

1 videodisc (56 min.)

TD195.E4 K55 2008

**Last Oasis.**

PBS Video (1997)

Cadillac Desert relates the story of the epic quest for water and the role it has played in the vast transformation of the American West and many parts of the world. This episode opens with the story of how America's large dams became examples for water projects abroad, particularly in developing countries. The film goes to India and China, where big dam building continues in full force, and to Mexico, the Middle East, and back to the American West to explore how, in the face of rising water needs, conservation may be humanity's last oasis.

Video Cassette (56 min.)

HD 1691. L37

**Las Vegas.**

New Video Group (1995)

The complete story of Las Vegas and its monumental masterpieces, from its origins as a dusty cow town, through its heyday as a mecca for the mob, to its modern renaissance as a family-style fantasyland.

Video Cassette (50 min.)

F 849. L35 L2254

**Las Vegas Hotels.**

New Video Group (1998)

An historical overview of the growth and development of Las Vegas and its hotels. Includes historic footage and photographs and remarks by Las Vegas architects and owners, show business personalities, and civic leaders.

Video Cassette (50 min)  
TX 909. L374

**Las Vegas Pedestrian Bridges.**

A&E Home Video (1993)

Animated views from different angles of pedestrian bridges over Tropicana Avenue and over Las Vegas Boulevard where they intersect that the Clark County Department of Public Works is planning to build.

Video Cassette (7 min. 48 sec.)  
TE 279.5 L37x

**Life After Oil.**

Ambrose Video Publishing, c2007

This program illustrates ways we can solve our dependence on fossil fuels through the use of alternative energy sources including wind power, fuel cells, hydrogen fuel, ethanol, biomass and solar power.

1 videodisc (30 min.)  
TJ808 .L54 2007

**Life On The Beam: A Portrait Of Harry Bridges; The Building Of The Golden Gate Bridge/ We Do The Work.**

We Do The Work (199-?)

Biographical overview of the life and struggles of the union organizer, Harry Bridges (1st work). Historical overview of the many challenges which faced the laborers who constructed the Golden Gate Bridge (2nd work).

Video Cassette  
HD 8083. C2 L53

**Lights, Lines, And Heavy Fines.**

Films For The Humanities and Sciences (1995)

This program explains the origin of traffic signals, examines the American grid plan, speaks to the man responsible for all traffic management in London, visits Scotland Yard's Traffic Control Center, and follows a London cabby back in time to contrast traffic and planning in Victorian London with today's city.

Video Cassette (29 min.)  
TA 1006. G72 L65

**Making The Connection: Careers For Chemical Engineers.**

Alfred P. Sloane Foundation (1997)

Provides industry overviews, advice, and information on the opportunities available to chemical engineers. More than 30 recent chemical engineering graduates, working in a variety of industries, share their experiences from the workplace.

Video Cassette (26 min.)  
TP 155. M33

**The Mercy Of Nature.**

PBS Video (1997)

Cadillac Desert relates the story of the epic quest for water and the role it has played in the vast transformation of the American West and many parts of the country. This episode traces the fierce political and environmental battles that raged around the transformation of California's Central Valley from semiarid desert into the most productive and environmentally altered agricultural region in global history.

Video Cassette (60 min.)  
HD 1739. C2 M47

**Mistake-Proofing: Achieving Zero Defects.**

Society of Manufacturing Engineers (1996)

Describes mistake-proofing ("poke yoke") and how this technique, developed by Shigeo Shingo, is used to achieve zero defects. Shows applications of mistake-proofing in three companies, United Electric Controls, TRW Inflatable Restraints, and Ford Motor Company. Ross Robson explains how to implement this process in a company, and Frank Plonka talks about the importance of the process now and in the future.

Video Cassette (30 min.)  
TS 176. M57

**Modern Marvels: The Space Shuttle.**

A&E Television Networks (2004)

The development of the Shuttle began in the 1950's and was triumphantly launched in 1981. This program examines the successes and failures of the missions and looks at the next generation Space Shuttle, the futuristic X-33.

1 videodisc (ca. 50 min.)  
TL795.5 .M63 2004

**More Engineering Disasters.**

New Video Group (1998)

Video footage and photos capture many of these engineering disasters as they happened (or immediately after), and engineers detail the changes that these accidents have spurred.

Video Cassette (57min.)

TA 495. M67 1998

**Mulholland's Dream.**

PBS Video (1997)

Cadillac Desert relates the story of the epic quest for water and the role it has played in the transformation of the American West. This episode tells of William Mulholland's search for water for the people of Los Angeles. Also discusses water's role in the history of Los Angeles and the city's challenges for the future.

Video Cassette (80 min.)

Guide

HD 1694. C2 M84

**New York Underground.**

PBS Video (1997)

Tells the story of the development and construction of the New York City subway system, the longest, most sophisticated electric subway system in the world. Experts on 19th century technology and social history look at the impact of this accomplishment on the city and its people.

Video Cassette (56 min.)

TF 847. N5 N48 1997

**The Next Big Thing?**

Kikim Media (2001)

Why aren't we using fuel cells today?

Looks at the history of other promising technologies to answer that question. "Entrepreneur Firoz Rasul, who wants to make the fuel cell as central to our lives as the light bulb, is betting that he can learn from inventors of the past."—Container

Video Cassette (56 min.)

TK 45. P662 2001

**Parallel Processing.**

University Video Communications (1989)

A lecture presented by Dr. Agerwala, who is a member of the corporate technical committee in the science and technology department at IBM corporate headquarters, at Columbia University, describing various forms of parallel processing, including clusters, multiprocessors and highly parallel processors. He illustrated these approaches by specific examples of different parallel systems directions currently being pursued at IBM.

Video Cassette (53 min.)

QA 76. 9 A73 A34x

**Planet Neighborhood.**

Bullfrog Films (1997)

A three part series looking at the latest in energy saving technology and good design.

3 Video Cassettes (56 min.)

TD 170 P573 v. 1-3

**Plants In Peril.**

Films For The Humanities And Sciences (1988)

Explains the need to preserve plants that might become a source of food and medicine as well as wild plants whose genes must be preserved to insure the development of genetically diverse crop strains. Also describes efforts to save vanishing species.

Video Cassette (26 min.)

QK 86. A1 P57x

**Plasticstown.**

New Video Group (1998)

Program examines the impact of plastics on modern life. Topics covered include: the invention and proliferation of plastics, improvements bought about by bakelite, development of plastic-based fabrics such as nylon, the use of plastics by the military, plastic products for the home, and plastics in medicine.

Video Cassette (48 min.)

TP 1116. P53 1998

**Principles Of High-Voltage Engineering.**

Institute of Electrical and Electronics Engineers (2000)

Covers four presentations: Basic principles of electric and magnetic fields, Basic principles of switching, Transient voltages in windings, and Insulation materials and dielectric design, plus a company visit.

4 CD-Roms

Guide

Exam

TK 3091. P75 2000

**Professional Ethics and Engineering.**

Duke University, Program in Science, Technology and Human Values (1999)

The video is designed to enhance professional ethics training for engineering students, it presents scenarios that illustrate common ethical dilemmas.

1 videodisc (15 min.)

BJ59 .P76 1999

**Pyramid.**

PBS Video (1988)

The story of Pyramid takes place during the period in Egyptian history known as the Old Kingdom. It chronicles the building of the pyramid of King Khufu, called Cheops by the Greeks, who ruled during Egypt's Fourth Dynasty. While parts of the story are fictionalized, much of it is based on historical events and on what has been learned from studying the pyramid itself.

Video Cassette (58 min.)

DT 63. P87x

**Pyramids: Majesty And Mystery.**

A&E Television (1997)

Discusses how and why the pyramids in Egypt were made and also discusses pyramids in Central America and Asia.

Video Cassette (50 min.)

DT 63. G74 1997

**The Race To the Moon.**

A&E Television Networks (2004)

Join the History Channel for the ultimate 35th birthday celebration of one of the most extraordinary events of the 20th century, in this incomparable collector's commemoration of the moonwalk and the early days of the space race.

v. 1. Failure is not an option.

v. 2. Code name Project

Orion ; Modern marvels : Apollo 13 ; Modern marvels : the space shuttle.

2 videodiscs (232 min.)

TL799.M6 R33 2004 1-2

**The Railway Age.**

Films for the Humanities & Sciences, [2005]

"This program examines the enormous impact of the introduction of railways, covering the technological revolution, the commercial and human reactions that culminated in Railway Mania, and the economic and social results: the increased demand for coal and iron, the delivery of fresh food and milk in cities, the reduction of local isolation and differences, the requirement of new management skills, the landscape changes created by viaducts, bridges, and tunnels, and the establishment of railway towns and entire new industries"—Container.

1 videodisc (20 min.)

HC255 .R34 2005

**Re-engineering The Manufacturing Enterprise.**

Society of Manufacturing Engineers (1993)

This program shows how to implement a re-engineering program, looks at the possible pitfalls, and describes the results expected of a properly executed program. Includes case studies.

Video Cassette (36 min.)

TS 176. R43

**Science First Hand: Three Classrooms At Work.**

WGBH Videos (1995)

Presents three public school teachers offering hands-on physical science experiences to students in real-life classrooms. Designed to assist teachers interested in engaging students in projects related to physical science curricula.

3 Video Cassettes (30 min. each [i.e. 100 min., 50 sec.]

Guide

Q 181. S372 v. 1-3

**The Science Of Cloning.**

Films For The Humanities And Sciences  
(1997)

"In July 1996, Dr. Ian Wilmut used an electric charge to bring dormant cells to life, and from these cells a sheep named Dolly--the world's first cloned mammal--was created. In this program, Michael McClure of the National Institutes of Health begins by tracing the history of such genetic reproduction technology as in vitro fertilization, parthenogenesis, and genetic therapy--antecedents of modern cloning practices. Computer graphics then illustrate the biomechanics of cloning. Cloning's implications for biology, medicine, and agriculture are discussed. Dr. Ruth Macklin of the Albert Einstein College of Medicine discusses the possible role of cloning in the prevention of extinction, the creation of "super" breeds of animals, the curing of disease, and the growth of human organs needed for transplant. A panel of experts discusses the future of cloning and possible abuses."--

Video Cassette (25 min.)  
QH 442.2 S35

**The Secret Of Life.**

WGBH Videos (1993)

Tape 1. The immortal thread / produced and directed by James F. Golway ; written by Graham Chedd and James F. Golway -- Accidents of creation / a production of Chedd-Angier in association with WGBH/Boston and BBC-TV ; written, produced and directed by Andrew Liebman -- Tape 2. Birth, sex and death / written, produced and directed by Tim Haines -- Conquering cancer / a production of Chedd-Angier in association with WGBH/Boston and BBC-TV ; written, produced and directed by Andrew Liebman -- Tape 3. The mouse that laid the golden egg / written, produced and directed by Paul Gasek -- Cell wars / written, produced and directed by Christine Zurbach Wisner -- Tape 4. Children by design / written and produced by Graham Chedd & Larkin McPhee ; directed by Larkin McPhee -- Who are you? / written, produced and directed by David Sington

4 Video Cassettes (440 min.)  
QH 506. S43

**Secrets Of A Master Builder.**

PBS Home Video (2000)

"At his death in 1887, James Eads was easily the most famous engineer in the world. He'd built gunboats that helped the Union win the Civil War; designed a stunning bridge for St. Louis -- the first in the world to be built of steel; and devised an ingenious scheme that kept the frequently silted-up Mississippi River open to ocean-going traffic -- a feat that turned New Orleans into the nation's second largest port. ... rediscovers the story of this remarkable man who began his working life as an errand boy, taught himself the principles of engineering ... and who was, by 37, one of the richest and most influential figures in the Midwest"--Container excerpt.

Video Cassette (55 min.)  
TA 140. E2 S43 2000

**The Shortest Network Problem.**

University Video Communications (1988)

Explores the Steiner problem which asks for the shortest network of line segments to interconnect a set of given points in the design of highway systems, oil pipelines, air conditioning systems and integrated circuits on silicon chips. Provides an introduction to NP-completeness, a fundamental concept in theoretical computer science.

Video Cassette (54 min.)  
TK 454. 2 G73x

**Silicon Run.**

Ruth Carranza Productions (1986)

Explains how integrated circuits work. Takes the viewer through the integrated circuit manufacturing process or the 'silicon run'.

Video Cassette (30 min.)  
Guide  
TK 7874. S57

**Silicon Run II.**

Ruth Carranza Productions (1993)

Follows the manufacturing process by which IC wafers are made into chips used in microcomputers and multichip units of high-end computers.

Video Cassette (35 min.)  
Guide  
TK 7874. S528

**Spare Parts.**

Films For The Humanities And Sciences  
(2000)

"...experts on the cutting edge of tissue engineering and regenerative medicine present the astounding results of their research...explain how new organs, arteries, ligaments, tendons, and skin are being grown from scratch...Ethics issues and the race for patents are discussed as well." Container.

Video Cassette (26 min.)  
RD 130. S63 2000

**The Sports Cathedral.**

A&E Home Video (1995)

"...experts on the cutting edge of tissue engineering and regenerative medicine present the astounding results of their research...explain how new organs, arteries, ligaments, tendons, and skin are being grown from scratch...Ethics issues and the race for patents are discussed as well." Container

Video Cassette (50 min.)  
TH 4714. S66 1994

**Stopwatch.**

Kikim Media (1999)

Gives a detailed description of Frederick Winslow Taylor's time-study approach to efficient work/production and how this approach has influenced modern work practices and other aspects of our lives.

Video Cassette (57 min.)  
T 55.9 K372 1999

**Stopwatch.**

Kikim Media, c1999

Gives a detailed description of Frederick Winslow Taylor's time-study approach to efficient work/production and how this approach has influenced modern work practices and other aspects of our lives.

1 videodisc (57 min.)  
T55.9 .K372 1999b

**Streamlines And Breadlines.**

PBS Home Video (1997)

An eight-part series presenting American history through its visual art, painting, sculpture, architecture and monuments. This sixth segment examines the mythic images of the 1920's and 30's as skyscrapers rise in New York and the rural heartland is idealized by Regionalists like Thomas Hart Benton. Artists of the WPA celebrate the worker as hero, while Jacob Lawrence tells stories of black America, and ambitious New Deal projects like Hoover Dam project self-confidence in hard times. Also examines the work of Raymond Hood, Edward Hopper, Stuart Davis, and Grant Wood.

Video Cassette (58 min.)  
N 6512. S77

**Super Bridge.**

WGBH Boston Video (1997)

Follows the four-year construction of the Clark Bridge, spanning the Mississippi River at Alton, Illinois. It is a rare example of what is known as cable-stayed design, an innovative variation on the suspension bridge.

Video Cassette (120 min.)  
TG 405. S86 1997

**Sustainable Development.**

Einstein Network Ltd. (2001)

Video Cassette  
HC79.E5 S8484 2001

**Sustainable Environments.**

San Luis Video Publishing (1994)

This video is an exploration of sustainability...."There are sections on transportation, buildings and landscapes, diet and agriculture, and lifestyles and work."—  
Container

Video Cassette  
HC79.E5 S864

**Testing Water --and Ethics.**

Foundation for Professional Practice, (1998)  
 A young engineer confronts his first professional dilemma and designs an ethical solution to an engineering problem.  
 1 videocassette (29 min.) + 1 guide (46 p.  
 TA157 .T47 1998

**Thinking Machines: The Creation Of The Computer.**

A&E Home Video (1996)  
 Traces the evolution of the computer over the past two decades.  
 Video Cassette (50 min.)  
 QA 76. 17 T45

**This Old Pyramid.**

WGBH (1993)  
 Reveals the ancient secret of how the pyramids were built by actually building one. A noted Egyptologist, Mark Lehner, and a professional stonemason, Roger Hopkins (This old house), join forces in the shadow of the great pyramid of Giza to put clever and sometimes bizarre pyramid construction theories to the test.  
 Video Cassette (90 min.)  
 DT 63. T45

**Thomas A. Edison: Father of Invention.**

New Video Group distributor (1996)  
 A biography of Thomas A. Edison's life describing his inventions. 1  
 Video Cassette (50 min.)  
 TK140.E3 T46 1996

**To Build A Dream: The Story of Hoover Dam.**

Bureau of Reclamation (1986)  
 Gives an overview of the construction of Hoover Dam and discusses its importance to the economic development of the Southwest and its contributions to agriculture, electric power generation, flood control, and tourism. Includes part of Franklin Delano Roosevelt's speech for the dedication of the dam.  
 Video Cassette (14 min., 21 sec.)  
 TC 557.5 H6 T62x

**To Engineer Is Human.**

Films Inc. (1990)  
 Traces the evolution of the computer over the past two decades.  
 Video Cassette (50 min.)  
 TA 174. T62x

**Traffic In Las Vegas: Paving The Way.**

KLVX Television (1986)  
 Discusses how the state and local officials deal with traffic problems in Las Vegas, Nevada.  
 Video Cassette (28 min.)  
 HE 356.5 L35 T73

**The Underground.**

Unapix Entertainment (2000)  
 Discusses the world's first underground railway, which was opened on January 10, 1863, in London.  
 Video Cassette (52 min.)  
 TF 847. L6 U53 2000

**Understanding cities.**

Films for the Humanities (1996)  
 Looks at cities past and present with a focus on issues of transportation, electricity, light, water, sewage, and trash. Examines differences between cities that have evolved over time and planned cities. Cities profiled include New York City, Portland, Ore., London, Teotihuacan, and Brasilia.  
 Video Cassette (53 min.)  
 HT151. U522 1996

**What's Out There: Careers For Electrical Engineers And Computer Scientists.**

Alfred P. Sloane Foundation (1997)  
 An overview of job opportunities, focusing on what engineers and computer professionals actually do, including research, teaching, design, manufacturing, testing and evaluation, manufacturing and applications, and maintenance and service.  
 Video Cassette (25 min.)  
 TK 159. W43

**When We Left Earth: The NASA Missions.**

Discovery Communications, [2008]  
 Chronicles NASA's history, including the Mercury program, moon landings, and the first untethered space walk.  
 3 videodiscs (ca. 258 min.)  
 TL789.8.U5 W44 2008

**Why The Towers Fell.**

WGBH Boston Video (2002)  
 Discusses how an investigative team of structural engineers came to understand why the World Trade Center towers collapsed on Sept. 11, 2001. Includes interviews with survivors and rescue personnel.  
 Video Cassette (56 min.)  
 TA 219. W48 2002

**Working Lives.**

Films for the Humanities & Sciences, [2003]

This program concentrates on the crucial century of radical change between 1750 and 1850, when large numbers of people began to work for the first time in factories rather than on the land, and when agriculture had to adapt to provide for an expanding population.

1 videodiscs (20 min.)

HC254.5 .W67 2003