

Introduction about Software Engineering:

Software Engineering provides a standard procedure to design and develop a software.

The term **software engineering** is the product of two words, **software**, and **engineering**.

The **software** is a collection of integrated programs.

Software subsists of carefully-organized instructions and code written by developers on any of various particular computer languages.

Computer programs and related documentation such as requirements, design models and user manuals.

Engineering is the application of **scientific** and **practical** knowledge to **invent, design, build, maintain, and improve frameworks, processes, etc.**

NATURE OF SOFTWARE

Software is:

- (1) instructions (computer programs) that when executed provide desired features, function, and performance;
- (2) data structures that enable the programs to adequately manipulate information, and
- (3) document that describes the operation and use of the programs.

Characteristics of software

- Software is developed or engineered, it is not manufactured in the classical sense.
- Software does not wear out. However it deteriorates due to change.
- Software is custom built rather than assembling existing components.
- Although the industry is moving towards component based construction, most software continues to be custom built

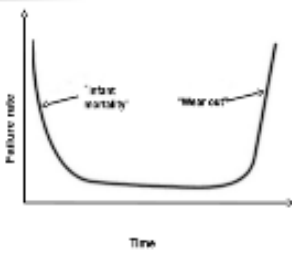


Fig: FAILURE CURVE FOR HARDWARE

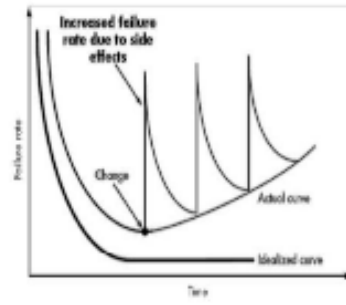


Fig: FAILURE CURVE FOR SOFTWARE