

**HIGHER TECHNICAL INSTITUTE**

**ELECTRICAL ENGINEERING COURSE**

**DIPLOMA PROJECT**

**FIBER OPTICS**

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**BY: CHRISTIANA STEFANIDOU**

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"Dedicated specially from the bottom of my heart to the people  
I love most, to my dearest family, friends and to my other  
half, for there spiritual help and understanding!"

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## SUMMARY

This book is indicating generally in the main features, the principles and technology of fiber optics, which can be described as a communication revolution.

Following a specific structure, this book starts from the history of fiber optics and continues with the basics, network, cables, cable specifications, connector and splices, fiber optic hardware, guidelines for better fiber optic design and installation, ways of ensuring safety on the job and many other functions related to fiber optics.

The book also details applications in which fiber is employed.

Here is also being demonstrated some experiments that are dedicated to functions and features of fiber optics, related to other components and instruments.

A lot of practical work took place for the accomplishment of this book in order to emphasize more the process of construction and the function that fiber optic provide to the technology and more generally to the whole world.

Briefly the meaning of fiber optics in the technology and the reasons that makes them so widely used through the industries according to the corresponding standards and basics that are used for each type of fiber optic.

A glossary at the end of the book, clarifies even the most difficult technical terms that are used from the beginning of the book until the end.