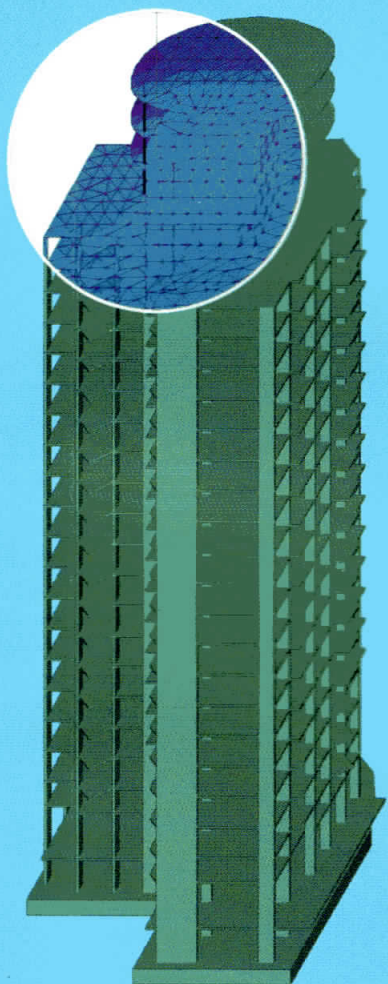


MINISTRY OF EDUCATION OF SCIENCE OF UKRAINE  
National Aviation University

Barabash M.S.

# COMPUTER TECHNOLOGIES IN BUILDING

Study guide for student of speciality  
“Industrial and civil construction”



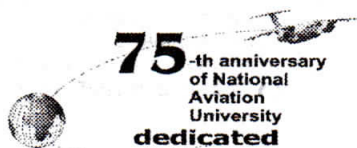
Kyiv 2008

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE  
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## COMPUTER TECHNOLOGIES IN BUILDING

Study guide for students of speciality  
"Industrial and civil constructions"



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В 24

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National Aviation University (minutes №3 of 03.07.2008).*

This study guide is a manual on working in the system of the automated design and construction LIRA. The manual is intended for students of speciality "Industrial and civil constructions", postgraduates and teachers of technical institutions of higher learning, employees of research and project organizations.

The purpose of the study guide consists in presentation of design technology and numerical analysis of constructions in the environment of the program complex LIRA.

**Барабаш М.С.**

В 24 Комп'ютерні технології в будівництві: навч. посібник / М.С. Барабаш.  
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Посібник містить основні поняття з технології моделювання і чисельного аналізу конструкцій в середовищі програмного комплексу ЛІРА. Призначений для проведення міцнісних розрахунків із застосуванням систем автоматизованого проектування.

Для студентів спеціальності 6.092100 «Промислове та цивільне будівництво», а також для аспірантів і викладачів вищих технічних навчальних закладів та співробітників науково-дослідних і проектних організацій.

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Навчальне видання

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## КОМП'ЮТЕРНІ ТЕХНОЛОГІЇ В БУДІВНИЦТВІ

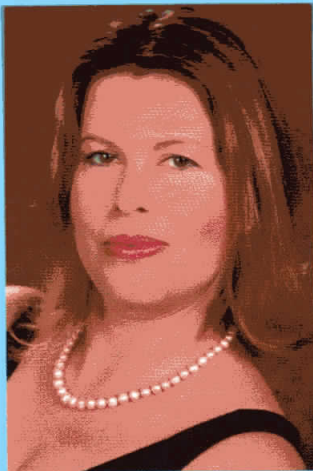
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## **LIRA**

calculation of durability of construction,  
scientific research and engineering practice